

No. 2014-1767

**In The
United States Court of Appeals
For The Federal Circuit**

ACHATES REFERENCE PUBLISHING, INC.,

Appellant,

v.

APPLE, INC.,

Appellee.

Appeal from the United States Patent and Trademark Office,
Patent Trial and Appeal Board in IPR2013-00080

**CORRECTED BRIEF OF APPELLANT
ACHATES REFERENCE PUBLISHING, INC.**

Brad Pedersen, Esq.
PATTERSON THUENTE
PEDERSEN, P.A.
80 South Eighth Street, Suite 4800
Minneapolis, MN 55402
(612) 349-5740

Vincent E. McGeary, Esq.
Michael Cukor, Esq.
McGEARY CUKOR, LLC.
7 Dumont Place
Morristown, NJ 07960-4125
(973) 339-7367

Jason Paul DuMont, Esq.
Wayne S. Breyer, Esq.
Kenneth Ottesen, Esq.
KAPLAN BREYER SCHWARZ
& OTTESEN, LLP.
100 Matawan Road, Suite 120
Matawan, NJ 07747-3913
(732) 687-7990

*Attorneys for Appellant
Achates Reference Publishing, Inc.*

Dated: December 8, 2014

CERTIFICATE OF INTEREST

Counsel for Appellants Achates Reference Publishing, Inc. certifies the following:

1. The full name of every party or amicus represented by me is:

Achates Reference Publishing, Inc.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not applicable.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None.

4. The names of all law firms and the partners or associates that appeared for the party or amicus now represented by me in the trial court or agency or are expected to appear in this court are:

Brad D. Pedersen

Eric Chadwick

Bradley J. Thorson

**Patterson Thuyente Pedersen,
P.A.**

Vincent E. McGeary

Michael Cukor,

formerly of **Gibbons, P.C.**, now
of **McGeary Cukor, LLC**.

Jason Paul DeMont

Wayne S. Breyer

Kenneth Ottesen

**Kaplan Breyer Schwarz &
Ottesen, LLP**

**(successor to DeMont &
Breyer, LLC)**

December 8, 2014

/s/ Brad Pedersen

BRAD PEDERSEN

PATTERSON THUENTE PEDERSEN, P.A.

80 South Eighth Street, Suite 4800

Minneapolis, MN 55402

Telephone: 612-349-5740

Facsimile: 612-349-9266

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TABLE OF ABBREVIATIONS

Parties

Achates	Patent Owner/Appellant Achates Reference Publishing, Inc.
Apple	Petitioner/Appellee Apple, Inc.
Board	Patent Trial and Appeal Board
QuickOffice	QuickOffice, Inc., a co-defendant of Apple in the related litigation
PTO	United States Patent and Trademark Office

Cites

§ 312(a)(2)	35 U.S.C. § 312(a)(2)
§ 314(a)	35 U.S.C. § 314(a)
§ 315(b)	35 U.S.C. § 315(b)
(A____)	Joint Appendix at page(s) ____

Terms

‘889 patent	U.S. Patent No. 5,892,889 – the subject of IPR2013-00081 and Federal Circuit No. 14-1788
‘403 patent	U.S. Patent No. 6,173,403 – the subject of IPR2013-00080 and Federal Circuit No. 14-1767
AIA	Leahy-Smith America Invents Act
Board	The Patent Trial and Appeal Board

Decision to Institute	The Decision – Institution of Inter Partes Review (A353-A389)
Final Written Decision	The Final Written Decision (A1-A54)
IPR	inter partes review; IPR2013-00080
sample SDK agreement	Apple Inc. iPhone SDK Agreement (A4994-5003)
Trial Practice and Procedure	37 C.F.R. § 42.1 <i>et seq.</i>
Trial Practice Guide	Office Patent Trial Practice Guide, 77 <i>Fed. Reg.</i> 48756-48773 (Aug. 14, 2012).

STATEMENT OF RELATED CASES

Pursuant to Federal Circuit Rule 47.5(a), appellant states:

(a) There have been no previous appeals in this proceeding.

(b) *Achates Reference Publishing, Inc. v. Apple, Inc.*, Fed. Cir. No. 2014-1788, is a companion case to this appeal.

(c) There are no cases known to counsel pending in this or any other court that will directly affect or be directly affected by this court's decision in this appeal, except to advise that the companion case identified above addresses the same or similar issues as this appeal. Appellant also advises that U.S. Patent No. 5,982,889 is the subject of Civil Action no. 2:11-cv-00294-(JRG-RSP) (E.D. Tex.), where Patent Owner and Petitioner are plaintiff and defendant, respectively.

I. STATEMENT OF JURISDICTION

The Board asserted jurisdiction under 35 U.S.C. § 314 and issued the Decision Institution of Inter Partes Review (hereinafter the “Decision to Institute”) pursuant to 37 C.F.R. § 42.108. (A353-354). The Board asserted jurisdiction under 35 U.S.C. § 6(c) and issued the Final Written Decision pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. (A3). Achates, timely filed a notice of appeal on July 30, 2014, which was received and docketed by the Court on July 31, 2014. (Dkt. 1 at 2-7). This Court has jurisdiction of this appeal pursuant to 28 U.S.C. § 1295(a)(4)(A) and 35 U.S.C. §§ 319 and 141(c).

II. STATEMENT OF THE ISSUES

1. Whether the Board exceeded its authority by instituting an IPR without substantial evidence to satisfy 35 U.S.C § 315(b)’s mandate that an IPR “may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.”

2. Whether the Board erroneously put the burden on Achates to prove that Apple’s co-defendants were real parties in interest or privies, thereby

misinterpreting § 315(b) and ignoring the PTO's regulations which put the burden on Apple to demonstrate that the Board has authority.

3. Whether the Board acted arbitrarily and capriciously in denying Achates discovery of Apple's agreements with its co-defendants and in relying on an unsigned sample agreement from Apple – rather than the actual agreements – to conclude that Apple's co-defendants were not real parties in interest or privies.

III. STATEMENT OF THE CASE

A. Statement of Facts

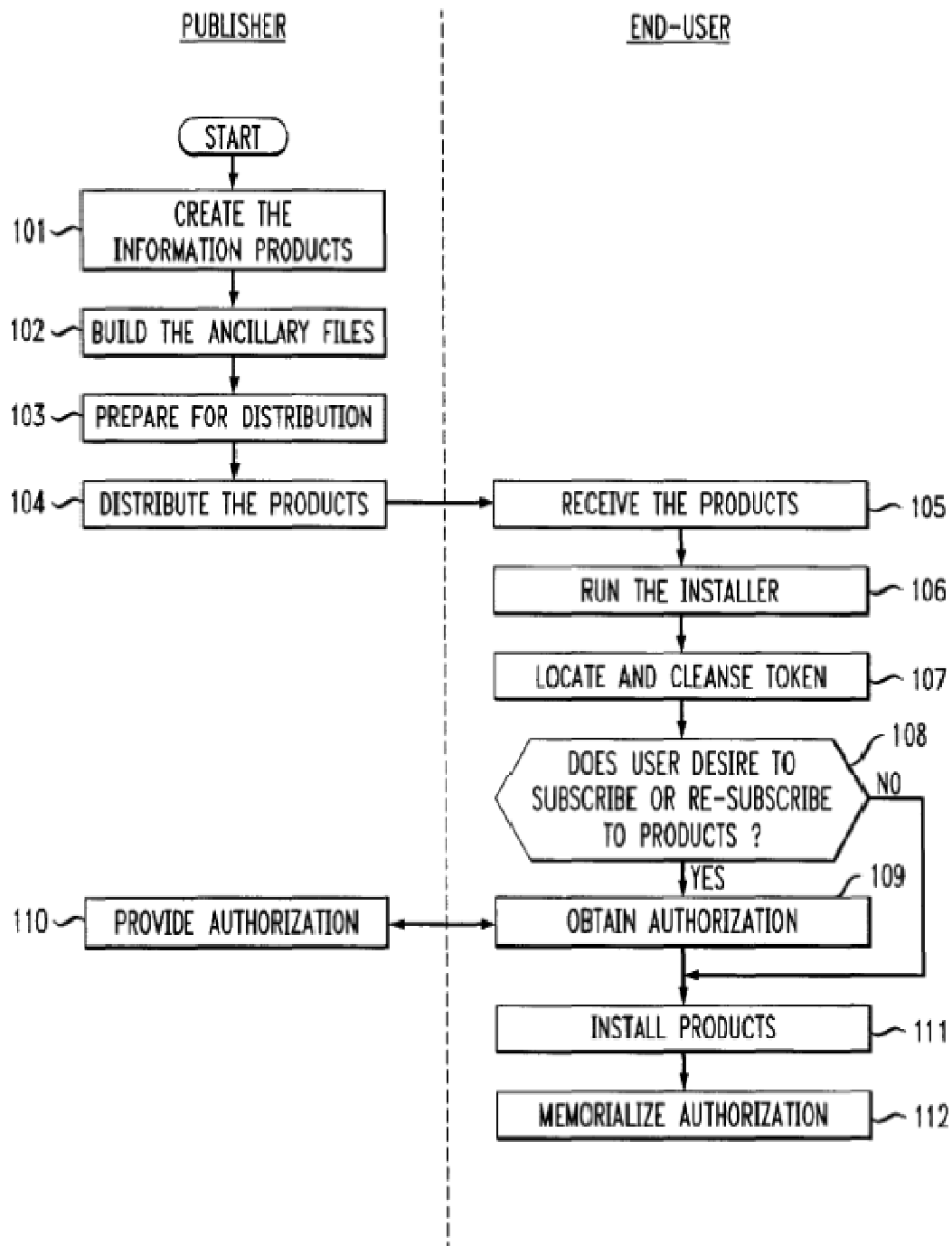
1. The '403 Patent

The Patent Office granted Jason DeMont United States Patent No. 6,173,403 on January 9, 2001, which issued from a continuation-in-part application claiming priority to April 30, 1997. (A55). Mr. DeMont invented a technology directed to overcoming a common software distribution problem that existed at the time of the invention. (A5220). Publishers distributed software with security codes printed on the distribution medium or its packaging. (A5220). Once the purchaser had possession of the security code, the purchaser could install the software on multiple computers or share the code with his or her friends. (A5220). This resulted in widespread “casual copying” of software. (A5220).

The illustrative embodiment discloses distributing HTML “law libraries” on a physical medium. (A5220). The patent teaches using an “installer” to install the HTML files. (A5221). The invention uses cryptography, and notes that the encryption relies on then-existing cryptography techniques. (A5221). The illustrative system has no “external dependencies.” it does not require an independent license clearinghouse, nor does it require a public-key infrastructure. (A5221). The disclosed technology of the ‘403 patent needs no specialized hardware or software that a user must install and configure beforehand. (A5221). It relies on the software installer and the publisher. (A5221).

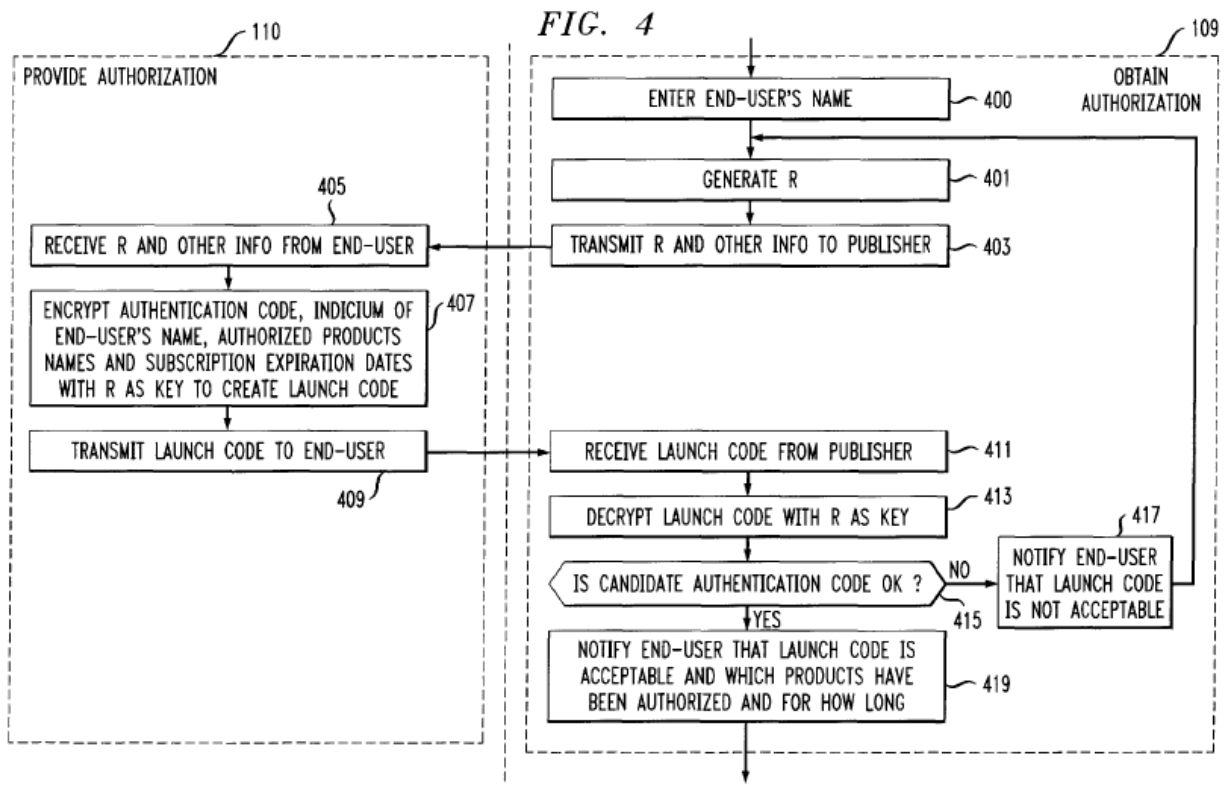
Figure 1 depicts a flowchart of the exchanges between a publisher and end-user for accomplishing software installation according to the ‘403 patent:

FIG. 1



The publisher builds the information products, prepares them for distribution, and then distributes the products directly to end-users, without the need for an intervening distribution system. (A56). The end-user computer runs a program called an installer, which determines whether the end-user may install the product. (A56). If not, the end-user obtains authorization from the publisher, installs the information product and memorializes the authorization in a token. (A56).

Figure 4 illustrates an example of how the system obtains authorization from the publisher:



(A59).

The end-user system generates an encryption key, R, and transmits it to the publisher. (A59). In the Figure 4 example, the publisher creates an encrypted launch code using R as the key to encrypt an authentication code, an indicium of the end-user's name, the names of the authorized products and expiration dates. (A59). The publisher sends the encrypted launch code to the end-user, where the end-user decrypts the launch code using R as the key. (A59). Decrypting the launch code recovers the authentication code. (A59). The installer on the end-user's computer determines whether the authentication code received in the launch code (the "candidate authentication code") is acceptable and if so installs the information product. (A59). If the candidate authentication code is unacceptable, the information products are not installed. (A59). The '403 patent states that "[t]he purpose of generating a new serial number, R, each time the installer requires a launch code is to prevent the end-user from using a single launch code to install the information products on multiple computers." (A64 – Col. 10, lines 61-64).

2. Infringement Litigation Over The '403 Patent

Achates asserted the '403 patent in Civil Action no. 2:11-cv-00294-JRG-RSP (E.D. Tex.) against multiple software publishers in June of 2011. (A4952). The Complaint alleged infringement of the '403 patent relating to defendants' use of activation technology in software distribution. (A4952-4959). Achates served

all of the defendants as of July 14, 2011. (A4963-4965). At least three of the defendants, Electronic Arts, Inc., Symantec Corporation, and QuickOffice, Inc., distributed their software via Apple's App Store. (A5022-5032).

Achates filed an Amended Complaint on June 20, 2012, additionally naming Apple as a defendant. (A2388). In the Amended Complaint, Achates alleged that Apple infringed by distributing "apps via the Mac App Store for desktop and laptop computers, and the App Store for mobile devices such as the iPhone and iPad." (A2396). Achates also alleged that Apple caused others to infringe when distributing apps over either of Apple's App Stores and that Apple and QuickOffice both infringed when distributing QuickOffice apps on the App Store:

52. Apple also causes third party developers to use such technology in distributing and installing third party apps via the Mac App Store and the App Store. Without limitation, defendants QuickOffice and Apple distributed and continue to distribute products such as QuickOffice Pro via at least the App Store. Distribution of such products constitutes infringement of at least claim one of the '403 patent and claim one of the '889 patent. Such products infringe the '889 patent and the '403 patent by without limitation employing Apple's software distribution technology.

(A2396).

3. Apple's Relationships With Its Co-defendants

Although the Board denied discovery into the details of Apple's relationship with its co-defendants, Apple does admit that it had at least one agreement with one of its co-defendants – QuickOffice – at the time of the Petition:

Achates 129. QuickOffice has entered into at least one form of an agreement related to app development with Petitioner prior to the Petition being filed.

Response: Admitted.

(A550; A342-349; A408-409; A694-696). Apple also admits that the undisclosed Apple-QuickOffice agreement (or agreements) relates to QuickOffice “app” development and that Apple and QuickOffice entered their agreement before Apple petitioned for inter partes review. (A550).

A sample agreement that Apple uses with its “app” developers is publicly available and is entitled “Apple Inc. iPhone SDK Agreement” (hereinafter the “sample SDK agreement”). (A4994-5003). The sample SDK agreement provides for defense and indemnity obligations related to patent infringement claims by third parties:

6. Indemnification

To the extent permitted by law, You agree to indemnify, defend and hold harmless Apple, its directors, officers, employees, independent contractors and agents (each an "Apple Indemnified Party") from any and all claims, losses, liabilities, damages, expenses and costs (including without limitation attorneys fees and court costs) (collectively "Losses") incurred by an Apple Indemnified Party as a result of Your breach of this Agreement, a breach of any certification, covenant, representation or warranty made by You in this Agreement, any claims that Your Applications violate or infringe any third party intellectual property or proprietary rights, or otherwise related to or arising from Your use of the SDK, Your Application(s) or Your development of Applications.

(A5000). The sample SDK agreement also limited Apple's counterparty from entering into settlements without Apple's consent:

In no event may You enter into any settlement or like agreement with a third party that affects Apple's rights or binds Apple in any way, without the prior written consent of Apple.

(A5000).

B. Relevant Procedural History of the Inter Partes Review

The Petition for inter partes review of the '403 patent was filed on December 14, 2012, and it identified Apple as the only "real party of interest." (A148; A81). The Petition discloses that the '403 patent was the subject of a patent infringement action, and that Apple was named a defendant on June 20, 2012. (A82). Apple also asserted – but without evidence – that neither Apple nor any party in privity with Apple had been served with a complaint alleging infringement of the '403 patent more than one year before it filed the Petition. (A81). In addition, the Petition failed to disclose when the infringement action was commenced against Apple's co-defendants; it failed to identify Apple's co-defendants, and it failed to state when its co-defendants were served. (A81-82).

Prior to the filing of the Patent Owner's Preliminary Response, the Board conducted a conference call to hear Achates' request to file a motion for additional discovery pursuant to 37 C.F.R. § 42.51(b)(2). (A151-154). Achates sought discovery of any agreements, including joint defense agreements, between Apple

and its co-defendants in the infringement litigation. (A152). Achates advised the Board that Apple's co-defendants had been served more than 1 year before Apple filed its Petition. (A152). Achates also advised the Board of the indemnity provision in the sample SDK agreement. (A152). Apple again asserted that it was the only real party in interest. (A152).

The Board authorized the motion, but then denied Achates any discovery. (A152; A342-349). After noting that the motion raised the prospect that the inter partes review might be proscribed by §315(b), the Board reasoned that granting discovery of Apple's agreements with its co-defendants would not be in the interests of justice. (A344; 348).

The Board, however, did acknowledge that the question of who is a real party in interest and privy is “highly fact-dependent,” that “a number of factors may be relevant to the analysis,” and that whether the party could exercise control over a party's participation in the proceeding is one of the factors. (A345-346).

Nevertheless, the Board denied discovery because, among other reasons, “Achates provides no proof that any of Apple's co-defendants in the related litigation have signed the SDK Agreement.” (A346). The Board also stated that the sample SDK agreement did not give the developer the right to intervene and that indemnification was not one of the substantive legal relationships that could

support a finding of privy or real party in interest. (A346-347). The Board called Achates' request for discovery “mere allegation and speculation,” although Apple did not dispute the existence of the agreements. (A348; A172).

The Board issued the Decision to Institute on June 3, 2013 after receiving Achates' Preliminary Response. (A353; A181). In its Preliminary Response, Achates requested that the Board deny the Petition “because the Petition fails to meet the requirements of 35 U.S.C. § 315(b).” (A186). Although the Board again acknowledged the highly fact-dependent nature of the real party in interest and privy questions, the Board viewed 315(b) as putting the burden on Achates to prove that Apple’s co-defendants were real parties in interest or privies:

We are not persuaded that any of the co-defendants in the related litigation are real-parties-in-interest or privies of Petitioner and, therefore, do not deny the Petition for failure to comply with the statutory requirements for instituting an *inter partes* review.

(A367; A373). The Board reasoned that the absence of evidence of real party in interest or privy supported a determination that its authority was not proscribed by § 315(b). (A369).

Achates filed its Patent Owner Response on September 17, 2013. (A413). The Patent Owner Response again requested dismissal of the Petition based on the lack of the Board's statutory authority under § 315(b). (A465-472). Achates noted that Apple did not dispute the existence of an agreement with QuickOffice or the

inclusion of an indemnity provision in that agreement, and contended that the Board improperly denied discovery of the actual agreements. (A466-A467). Achates further contended that the infringement action against Apple fell within the indemnity provisions of the sample SDK agreement and that the factors articulated in *Taylor v Sturgell*, 533 U.S. 880, 894 (2008) compelled a conclusion of privity or real party in interest. (A467-468). Achates directly opposed the Board's interpretation that it could properly, under § 315(b), put the burden on Achates to demonstrate the Board's lack of authority:

Standing before an administrative agency depends on the language of the statute and regulations that confer standing before that agency.

Ritchie v. Simpson, 170 F.3d 1092, 1094-95 (Fed. Cir. 1999). The burden of proof of administrative standing does not shift and remains on the party instituting the action before the agency. Rule 42.1(d).

(A471).

In addition, the Patent Owner's Response contained Proposed Statements of Material Facts, and, in response, Apple admitted that it had an agreement with QuickOffice. (A477-478; A550). One of the proposed statements of material fact regarded whether the agreement between Apple and QuickOffice included an indemnity provision related to intellectual property infringement. (A478). Apple refused to respond because answering the question would provide Achates with the discovery that the Board denied:

Achates 130. An agreement related to app development entered into between QuickOffice and Petitioner prior to the Petition being filed includes an indemnification provision of Petitioner by QuickOffice for intellectual property infringement.

Response: Neither admitted nor denied. Patent Owner presents no evidence to support its statement, and answering the question would provide Patent Owner with discovery that the Board expressly refused to authorize.

(A550).

The Board issued a Final Written Decision in which it asserted statutory authority under § 315(b) for the same reasons that the Board denied discovery of the actual agreements. (A1; A9). In the Final Written Decision, the Board noted that “Apple acknowledges that it entered into ‘at least one form of an agreement related to app[lication] development with [QuickOffice],’ but does not admit that the agreement included the indemnification provision cited by Achates.” (A1). The Board again asserted that Achates presented no evidence demonstrating the terms of the relationship between QuickOffice and Apple, while foot-noting its refusal to grant Achates discovery of the Apple-QuickOffice Agreement:

³ Also, in an earlier Order, we denied Achates’s request for additional discovery on the Section 315(b) issue. Paper 18.

(A9).

Achates, timely filed a Notice of Appeal to address whether the Board exceeded its authority under § 315(b). (Dkt. 1 at 2-7).

IV. SUMMARY OF THE ARGUMENT

Achates requests that the Court vacate the Board's Final Written Decision and mandate that the Petition be dismissed for three reasons.

1. The first reason is that the Board's authority to institute the IPR was proscribed by 35 U.S.C. § 315(b), and, therefore, the Board's issuance of the Final Written Decision was ultra vires. There are a number of statutory provisions that must be satisfied in order for the Board to have the authority to conduct an IPR. Two of these provisions are 35 U.S.C. §§ 314(a) and 315(b).

Section 315(b) proscribes the Board's authority to institute an inter partes review if the petition is filed more than 1 year after the date on which the petitioner, a real party in interest, or a privy of the petitioner is served with a complaint alleging infringement of the patent.

Apple filed its petition more than 1 year after the date on which Apple's co-defendants in the related litigation were served with a complaint alleging infringement of the '403 patent. (A148-150; A4963-4965). Therefore, if any of the co-defendants were real parties in interest or privies, then the Board's authority was proscribed by § 315(b).

The Board stated that whether any of Apple's co-defendants is a real party in interest or privy is a "highly fact-dependent question," and the Court reviews fact

findings for substantial evidence. (A367); *In re Gartside*, 203 F.3d 1305 (Fed. Cir. 2000). The statute and the PTO regulations put the burden on Apple to demonstrate the Board's authority in the petition. *See* 37 C.F.R. § 42.104(a) and 77 *Fed. Reg.* 48680, 48688 (Aug. 14, 2002).

Although Apple submitted evidence to support a finding by the Board that it had the authority to institute an IPR under 35 U.S.C. § 314(a), Apple did not submit evidence to support a finding by the Board that it had authority under § 315(b). (A2582-2751). Nevertheless, the Board ignored the lack of Apple's evidence and determined that Apple's co-defendants were not real parties in interest or privies and that its authority was not proscribed by § 315(b). (A366-373). Because the Board's finding is not supported by substantial evidence, the Board's institution of the IPR and issuance of the Final Written Decision was *ultra vires*.

2. The second reason is that the Board erroneously proceeded as if § 315(b) were an affirmative defense; it ignored Apple's lack of evidence on the issue and put the burden on Achates to prove that Apple's co-defendants were real parties in interest or privies. This is why the Board felt justified in making its determination – without substantial evidence – that § 315(b) did not proscribe its authority.

Section 315(b) proscribes the Board's authority in some factual circumstances, and this proscription exists irrespective of whether Achates raises the issue or offers evidence to prove it. No part of § 315(b) requires Achates to prove that Apple's co-defendants were real parties in interest or privies, and the Board erred when it required these proofs from Achates.

Furthermore, the Board misapplied the Patent Office regulations governing contested proceedings, which put the burden of proving the Board's authority on the petitioner. The PTO's regulations for inter partes review specify that the petitioner – and not the patent owner – bears the burden of demonstrating the Board's authority. 37 C.F.R. § 42.104.

Although the Patent Office regulations miscast the issue of whether the Board's authority is proscribed by § 315(b) as a question of the petitioner's "standing," § 42.104 provides that "[i]n addition to the requirements of §§ 42.6, 42.8, 42.22, and 42.24, the petition must set forth" that the petitioner is not barred or estopped from an inter partes review:

(a) *Grounds for standing.* The petitioner must certify that the patent for which review is sought is available for *inter partes* review and that the petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in the petition.

The Patent Office explains that § 42.104(a) requires the petitioner to demonstrate the Board's authority, and that the certification is the minimum required by § 42.104(a):

... a petition must demonstrate that the petitioner has standing. To establish standing, a petitioner, at a minimum, must certify that ... the petitioner is not barred or estopped from requesting [the IPR]. This requirement is to ensure that a party has standing to file the *inter partes* review and would help prevent spuriously-instituted *inter partes* reviews. Facially improper standing will be a basis for denying the petition without proceeding to the merits of the petition.

77 Fed. Reg. 48680, 48688 (Aug. 14, 2002).

The Board's actions in the case are contrary to the PTO's regulations and cannot be sustained. *See Align Tech., Inc. v. ITC*, 2014 WL 3537066 at *4, 111 USPQ.2d 1855, 1860 (Fed. Cir. 2014) (setting aside decision "[b]ecause the Commission circumvented its own rules."); *United States v. UPS Customhouse Brokerage, Inc.* 575 F.3d 1376, 1382 (Fed. Cir. 2009) ("An agency must follow its own regulations.")

By erroneously putting the burden on Achates to prove that the Board's authority is proscribed by § 315(b), the Board's Final Written Decision should be vacated and the Petition dismissed.

3. The third reason is that Board arbitrarily and capriciously denied Achates discovery of Apple's agreements with its co-defendants but relied instead on an unsigned sample SDK agreement that Apple uses with its developers – rather than the actual agreements themselves – to support its authority under § 315(b).

Despite putting the burden on Achates to prove Apple's relationships with its co-defendants, the Board denied Achates discovery of Apple's relationships with its co-defendants. (A342-349; A408-409; A694-696). Achates submitted to the Board a sample SDK agreement that Apple enters into with its “app” developers. (A4994-5003). The sample SDK agreement contains indemnity, defense, and hold harmless provisions related to intellectual property infringement. (A5000). Three of Apple's co-defendants – Electronic Arts, QuickOffice, and Symantec – are “app” developers. (A5022-5032). Therefore, the sample SDK agreement is evidence that Apple had agreements with those co-defendants and that the agreements had indemnity, defense, and hold harmless provisions related to intellectual property infringement. Based on this evidence, Achates requested discovery of the actual agreements between Apple and the three co-defendants. (A156-166).

In response, the Board denied Achates discovery because – among other reasons – the Board said that Achates did not prove that Apple and its co-

defendants had signed the sample SDK agreement. (A346).

After the IPR was instituted and Apple admitted that an agreement did, in fact, exist, the Board again denied discovery of the agreement. (A550; A694-696).

Despite having rejected the evidentiary value of the sample SDK agreement for the purpose of discovery, the Board – in another lapse of reason – relied on the sample SDK agreement for the purpose of justifying its fact determinations. (A366-373; A9-13). The Board’s reliance on the unsigned sample SDK agreement shows the importance of having the actual Apple agreements to make supportable fact determinations. But the Board refused to review them.

The Board’s errors leave this Court without any record on which to review whether Apple’s co-defendants were real parties in interest or privies, and, therefore, without evidence to conclude whether the Board acted within its statutory authority under § 315(b). For this reason, the Court should vacate the Final Written Decision and mandate dismissal of the Petition.

V. ARGUMENT

A. Standard of Review

The Court reviews the Board's legal conclusion of its authority under 35 U.S.C. § 315(b) *de novo*. *Belkin Int’l, Inc. v. Kappos*, 696 F.3d 1379, 1381 (Fed. Cir. 2012). *See, In re Gartside*, 203 F.3d 1305, 1315 (Fed. Cir. 2000)

(whether the Board possessed jurisdiction to continue an interference proceeding is a question of law). The Board's factual findings that Apple's co-defendants are not real parties in interest or privies of Apple are reviewed for substantial evidence. *Id.* This Court has explained that substantial evidence is evidence that a reasonable mind might consider sufficient to support the finding of fact. *In re Antor Media Corp.*, 689 F.3d 1282, 1287 (Fed. Cir. 2012), (citing *Consol Edison Co. v NLRB*, 305 U.S. (1938)). Substantial evidence review involves examination of the record as a whole, taking into account evidence that both justifies and detracts from an agency's decision. *In re Gartside*, 203 F.3d 1305, 1312 (Fed. Cir. 2000).

B. The Board's Authority to Institute the IPR Was Proscribed by Statute; Therefore, the Board's Issuance of the Final Written Decision Was Ultra Vires

1. Section 315(b) Limits the Board's Authority to Conduct an Inter Partes Review

The Board stated that "[t]he standard for instituting an inter partes review is set forth in 35 U.S.C. § 314(a)" and proceeded as if § 314(a) were the only threshold for instituting an IPR. (A354). It is not.

For example, 35 U.S.C. § 315(b) states:

(b) Patent Owner's Action.— An inter partes review may not be instituted if the petition requesting the proceeding is filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.

This proscription on the Board's authority is not discretionary. If § 315(b) applies, then the Board lacks authority, the issuance of Final Written Decision was ultra vires and the Petition must be dismissed.

According to the Patent Office's Trial Practice Guide these limits to the Board's authority protect patent owners from successive litigation and "protect the integrity of both the USPTO and Federal Courts:"

The core functions of the "real party-in-interest" and "privies" requirement to assist members of the Board in identifying potential conflicts, and to assure proper application of the statutory estoppel provisions. The latter, in turn, seeks to protect patent owners from harassment via successive petitions by the same or related parties, to prevent parties from having a "second bite at the apple," and to protect the integrity of both the USPTO and Federal Courts by assuring that all issues are promptly raised and vetted.

77 *Fed. Reg.* 48756, 48759 (Aug. 14, 2012).

2. Whether Apple's Co-defendants Were Real Parties In Interest or Privies Presented a "Highly Fact-Dependent Question"

Apple filed its petition more than one year after its co-defendants had been served with a complaint alleging infringement of the '403 patent. (A148-150; A4963-4965). The Board was informed that it was likely that Apple and several of its co-defendants had entered into agreements concerning the subject matter of the infringement action. (A156-163; A189-200).

The Patent Office considers the determination of whether a non-party is a real parties in interest or privy to be dependent on the specific facts in the case. *Trial Practice Guide*, 77 *Fed. Reg.* 48756 at 48759, citing *Taylor v. Sturgell*, 553 U.S. 880 (2008). This Court, in other contexts, has instructed that resolving the privity question requires that all of the facts underpinning the relationship between the parties be examined:

Whether two parties are in privity depends on the nature of their relationship in light of the alleged infringement. "The closer that relationship, the more the equities will favor applying the doctrine" of assignor estoppel. *Shamrock Techs.*, 903 F.2d at 793 [*Shamrock Technologies, Inc. v. Medical Sterilization, Inc.*, 903 F.2d 789 (Fed. Cir. 1990)]. Assessing a relationship for privity involves evaluation of all direct and indirect contacts. *See Intel*, 946 F.2d at 838.

Mentor Graphics Corp. v. Quickturn Design Sys., 150 F.3d 1374, 1379 (Fed. Cir. 1998).

The Board noted this guidance in the Decision to Institute and acknowledged that the determination of whether Apple's co-defendants were real parties in interest or privies presented a "highly fact-dependent question."

Whether a non-party is a "real party-in-interest" or "privy" for purposes of an *inter partes* review proceeding is a "highly fact-dependent question" that takes into account how courts generally have used the terms to "describe relationships and considerations sufficient to justify applying conventional principles of estoppel and preclusion."

(A367).

But the Board asserted authority to consider the Petition and institute a trial for the IPR without evaluating all – or even any – of the direct and indirect contacts among Apple and its co-defendants. (A366-373).

Although Apple failed to provide the Board with evidence regarding whether its co-defendants were real parties in interest or privies, Achates alerted the Board to the existence of the § 315(b) issues, and provided the Board with a sample SDK agreement that demonstrated the likelihood that an agreement existed between Apple and at least three of its co-defendants. (A156-163; A4994).

The sample SDK agreement included an intellectual property indemnification provision and a defense and hold harmless provision. (A5000). Achates requested discovery of agreements between Apple and its co-defendants, which, given the authority issues at stake and the fact-dependent nature of privy and real party in interest issues, the Board should have welcomed. (A156-163).

Instead, the Board denied discovery and determined the “highly fact-dependent question” of whether Apple’s co-defendants were not real parties in interest or privies without evidence to support its decision. (A342-349; A366-373).

3. The Board's Determination That Apple's Co-defendants Were Not Real Parties In Interest Or Privies Lacks Substantial Evidence

This Court reviews the Board's determination of fact findings for substantial evidence. *In re Gartside*, 203 F.3d 1305 (Fed. Cir. 2000). While *In re Gartside* did not consider an inter partes review proceeding, the Court's analysis applies equally here:

The record before us on appeal thus dictates the parameters of our review. We cannot look elsewhere to find justification for the Board's decision. Furthermore, the record reflects the results of a proceeding in the PTO during which the applicant has been afforded an opportunity to bring forth the facts thought necessary to support his or her position.

Id. at 1314.

In situations where the reviewing court “must confine its review of agency fact finding to the record produced by the agency proceeding,” this Court has determined that the substantial evidence review applies. *Id.* at 1315. Because a decision to institute an IPR is reviewed on a closed record, the substantial evidence standard of review likewise applies. *Id.* at 1315.

The record here lacks substantial evidence to demonstrate that none of Apple's co-defendants are real parties in interest or privies of Apple. In reviewing a record for substantial evidence to support a factual finding, the Court considers whether a reasonable mind would consider the evidence adequate to support a

conclusion. *Dickinson v. Zurko*, 527 U.S. 150, 162 (1999) (quoting *Consolidated Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938)).

Apple submitted evidence in its petition to support a determination by the Board that it had authority under 35 U.S.C. § 314(a), but did not submit evidence to demonstrate that its co-defendants were not real parties in interest or privies. (A886). It should have. In accordance with the PTO's Regulations governing "Trial Practice and Procedure." 37 C.F.R. § 42.1 *et seq.* Apple had the burden to demonstrate in its petition that the Board had authority to institute and conduct the IPR.

According to the regulations, Apple's filing of an inter partes review petition began a "Preliminary Proceeding," which continued until the Board issued the written decision concerning whether to institute the trial. 37 C.F.R. § 42.2. The regulations establish preponderance of the evidence as the default evidentiary standard for the Preliminary Proceeding, which would have applied to issues of real party in interest and privity. *See* 37 C.F.R. § 42.1. The regulations required Apple to include in its petition "[a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, rules, and precedent." 37 C.F.R. § 42.22(a)(2). These regulations required Apple to submit affidavits and

documents as evidence directed to real party in interest and privy, and to identify all its evidence on its Exhibit List. 37 C.F.R. § 42.63(a-e). Apple submitted no such evidence.

Instead, Apple simply stated that it was not barred or estopped from seeking an *inter partes* review:

Petitioner certifies it is not barred or estopped from requesting *inter partes* review of U.S. Patent No. 6,173,403 (the ‘403 patent) (Ex. 1039). Neither Petitioner, nor any party in privity with Petitioner: (i) has filed a civil action challenging the validity of any claim of the ‘403 patent; or (ii) has been served a complaint alleging infringement of the ‘403 patent more than a year prior to the present date. Also, the ‘403 patent has not been the subject of a prior *inter partes* review or a finally concluded district court litigation involving Petitioner.

(A81); *see* 37 C.F.R. § 42.104. Apple elected to proceed without an evidentiary submission despite the Patent Office's guidance that real party in interest and privy present highly fact-dependent questions.

Neither Apple nor the Board contended that Apple's statement under 37 C.F.R. § 42.104(a) constituted an evidentiary showing. Likewise, under the Trial Practice and Procedure regulations, this statement is not evidence in the proceeding. The subpart provides that “[e]vidence consists of affidavits, transcripts of depositions, documents and things” “filed in the form of an exhibit.”

37 C.F.R. § 42.63(a). The regulations do not define statements in the petition as evidence. And according to 37 C.F.R. § 42.61(a), “Evidence that is not taken,

sought, or filed in accordance with this subpart is not admissible.” Nowhere do the governing regulations contemplate bare assertions as evidentiary in the “proceedings,” and neither Apple nor the Board relied on Apple's statement as evidence. The Board's actions in the case are contrary to the PTO's regulations and cannot be sustained. *See Align Tech., Inc. v. ITC*, 2014 WL 3537066 at *4, 111 USPQ.2d 1855, 1860 (Fed. Cir. 2014) (setting aside decision “[b]ecause the Commission circumvented its own rules.”); *United States v. UPS Customhouse Brokerage, Inc.* 575 F.3d 1376, 1382 (Fed. Cir. 2009) (“An agency must follow its own regulations.”)

A reasonable mind would not have considered the evidence before the Board sufficient to support the Board's conclusion of a lack of privity or real party in interest. To determine the extent of Apple's relationships with its co-defendants before instituting the IPR, the Board only considered the sample SDK agreement that Achates submitted to support its request for discovery of Apple's actual agreements with its co-defendants. (A366-373). As the Board noted, the sample SDK agreement was not specific to Apple and any co-defendant. (A346). The sample SDK agreement, however, would have demonstrated to a reasonable mind that there was a likelihood that QuickOffice and other Apple co-defendants had a substantive legal relationship with Apple relating to their activities on the Apple

App Stores and that there was a likelihood that those legal relationships included defense and indemnity obligations. But instead of examining the full extent of Apple's substantive legal relationships with its co-defendants, the Board looked only at the sample SDK agreement. No reasonable mind, however, would have considered the sample SDK agreement sufficient to determine the full extent of Apple's relationships with its co-defendants or that none of Apple's co-defendants were privies or real parties in interest.

This Court's decision in *Intel Corp. v. United States Int'l Trade Commiss 'n*, 946 F.2d 821, 836-839 (Fed. Cir. 1991) vacated a finding of lack of privity because the Commission's unduly restrictive test led it to ignore important facts and evidence. In that case, the Commission's finding that no privity existed between a patent assignor and a respondent in an ITC investigation failed to adequately consider all contacts – direct and indirect – between the assignor and the respondent. The Court, in concluding that privity existed, considered at length the indirect contacts between the respondent and the assignor. *Intel Corp.*, 946 F.2d at 838-840. For example, the court considered the role of the assignor in creating a joint venture with respondent, the assignor's indemnity agreement with the respondent, the assignor's role with the respondent's joint venture partner, the

financial relationships between the joint venture partners, and the assignor's brother's indemnity agreement with the respondent. *Id.*

Like the Commission in the *Intel Corp.* case, the Board here failed to consider sufficient evidence relevant to the fact questions of privity and real party in interest. This Court considers indemnity an important factor in determining privity:

Further, the indemnity agreement between George Perlegos and GI/M created a significant relationship between them. Such an indemnification agreement, in other cases, has alone been enough to find privity. *See Urbain v Knapp Bros. Mfg. Co.*, 217 F.2d 810 (6th Cir. 1954); *Weyerhaeuser Timber Co. v Bostitch, Inc.*, 178 F.Supp. 757, 760-61 (D.R.I. 1959). That George Perlegos would take on such a liability demonstrates that he had considerable interest in GI/M's contribution to the joint venture and its production of EPROMs.

Id. at 839. The Board here dismissed out of hand the indemnity provision in the sample SDK agreement and even refused to take into the record Apple's actual agreements with its co-defendants, including the Apple-QuickOffice agreement.

The complete lack of evidence on these highly fact-dependent questions requires this Court to vacate the Final Decision. In every case, the record must contain substantial evidence to support the Board's exercise of authority under § 315(b). Apple's petition submitted only lawyer statement, unaccompanied by any evidence concerning its relationships with co-defendants. A finding by the Board that none of the co-defendants was a privity or real party in interest is

unsupported by substantial evidence, and this Court should vacate the Final Decision and mandate dismissal of the petition.

C. The Board Misinterpreted Section § 315(b) and Patent Office Regulations, Erroneously Requiring Achates to Prove that the Board Lacked Authority

The Court should vacate the Final Written Decision because the Board misplaced the burden on Achates to prove Apple's privity with a co-defendant or to prove there were other, unidentified real parties in interest. The Board's error arose from misinterpreting the statute and from misapplying the PTO's regulations. This Court reviews the Board's interpretation of the clear and unambiguous statutory language *de novo*. *Belkin Int'l, Inc. v. Kappos*, 696 F.3d 1379, 1381 (Fed. Cir. 2012). The Board erred when it instituted the IPR without authority.

The Board misread the requirements of §§ 314 and 315 to conclude that § 314(a) is the only requirement that must be satisfied before the Board has the authority to institute an IPR. (A354) ("The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a)."). This is incorrect. Section 315(b) also states a requirement that must be satisfied before the Board has authority to institute an IPR. Based on its incorrect reading of the applicable statutory requirement for instituting a trial, the Board failed to analyze Apple's petition for evidence concerning § 315(b).

Instead, the Board erroneously put the burden on Achates to prove Apple's relationships with its co-defendants. The Board states that Achates “provides no proof” that “any of the co-defendants in the related litigation ever signed the SDK agreement.” (A369). Later, the Board stated that Achates failed to “persuade” the Board on the relevant issues. (A373).

By requiring Achates to prove Apple's relationships with its co-defendants, the Board misapplied the statutory language of § 315(b), and the Patent Office's regulations for inter partes reviews. Section 315(b) proscribes the Board's authority, and this proscription exists irrespective of whether Achates raises or offers evidence on real party in interest or privy. Read together with § 312(a)(2) – which requires the petition to identify the real party in interest – the statutory scheme recognizes that the petitioner must present the evidence demonstrating the Board's authority. No part of § 315(b) required Achates to prove Apple's relationships with its co-defendants, and the Board erred when it required these proofs from Achates.

Furthermore, the Board misapplied the Patent Office regulations governing contested proceedings, which put the burden of proving the Board's authority on the petitioner. The regulations require the petition to include the arguments and evidence supporting the requested relief. *See* 37 C.F.R. § 42.22(a). The

regulations also define the default evidentiary standard on questions-of-fact to be preponderance of the evidence. 37 C.F.R. § 42.1(d). When applied to the real party in interest and privy fact questions arising under § 315(b), the regulations impose on petitioner the burden of producing evidence in the petition to support a determination by the Board that its authority is not proscribed by § 315(b).

The Patent Office also adopted regulations specifically applicable to inter partes reviews, which specify that the petitioner – and not the patent owner – bears the burden on demonstrating the Board’s authority. 37 C.F.R. § 42.104. Although the Patent Office regulations miscast the issue of whether the Board’s authority is proscribed by § 315(b) as a question of the petitioner’s “standing,” § 42.104 provides that “[i]n addition to the requirements of §§ 42.6, 42.8, 42.22, and 42.24, the petition must set forth” that the petitioner is not barred or estopped from an inter partes review:

(a) *Grounds for standing.* The petitioner must certify that the patent for which review is sought is available for *inter partes* review and that the petitioner is not barred or estopped from requesting an *inter partes* review challenging the patent claims on the grounds identified in the petition.

The Patent Office explains that § 42.104(a) requires the petitioner to demonstrate the Board’s authority, and that the certification is the minimum required by § 42.104(a):

... a petition must demonstrate that the petitioner has standing. To establish standing, a petitioner, at a minimum, must certify that ... the petitioner is not barred or estopped from requesting [the IPR]. This requirement is to ensure that a party has standing to file the *inter partes* review and would help prevent spuriously-instituted *inter partes* reviews. Facially improper standing will be a basis for denying the petition without proceeding to the merits of the petition.

77 Fed. Reg. 48680, 48688 (Aug. 14, 2002).

This requirement does not substitute for the supporting evidence required by § 42.22 or diminish the default evidentiary requirements of § 42.1. By its express language, § 42.104 places an additional requirement on the petitioner of an *inter partes* review.

The Board's actions in the case are contrary to the PTO's regulations and cannot be sustained. *See Align Tech., Inc. v. ITC*, 2014 WL 3537066 at *4, 111 USPQ.2d 1855, 1860 (Fed. Cir. 2014) (setting aside decision “[b]ecause the Commission circumvented its own rules.”); *United States v. UPS Customhouse Brokerage, Inc.* 575 F.3d 1376, 1382 (Fed. Cir. 2009) (“An agency must follow its own regulations.”)

Neither statutory provisions nor Patent Office regulations require a patent owner to respond to the petition prior to institution of an IPR. 37 C.F.R. § 42.107(a). But if a patent owner does respond, like Achates did in this matter, the

regulations limit the response to setting forth the reasons why no *inter partes* review should be instituted under 35 U.S.C. § 314 and prohibit the patent owner from offering testimonial evidence. 37 C.F.R. § 42.107(a, c). In the context of the limited response a patent owner may make and the limited evidence the patent owner may present, the regulations placed no burden on Achates to prove Apple's co-defendants were real parties in interest or privies at the time the Board was required to determine its authority under § 315(b).

The Court should, therefore, vacate the Final Written Decision, because the Board misconstrued § 315(b) and its own regulations by placing the § 315(b) burden of proof on Achates – both before and after Achates made the Board aware of Apple's likely contractual relationships with its co-defendants. According to the Board's reading of § 315(b) – which reading requires patent owners to prove privity and real party interest without access to discovery or the ability to submit testimonial evidence – the Board assumes near unfettered authority to institute trials without regard to the highly fact-dependent questions of privity and real party in interest. Furthermore, the petitioner is most likely to be in exclusive possession of the facts that would prove or disprove privity and real party in interest.

Without justification, the Board treats the requirements of § 315(b) as an affirmative defense instead of a statutory requirement for authority. But the

Board's reading is wrong. Section 315(b) and the Patent Office regulations put an affirmative obligation on the petitioner to submit the appropriate evidence.

D. The Board Arbitrarily and Capriciously Denied Achates Discovery of Apple's Executed Agreements and Relied On a Non-Evidentiary Sample SDK Agreement To Determine Its Authority Under Section 315(b)

The Court should vacate the Final Written Decision because the Board based its decision on a sample SDK agreement it considered non-evidentiary, while arbitrarily denying Achates discovery of specific executed agreements relevant to the real party in interest and privy questions. While the Court reviews *de novo* the Board's legal conclusion of authority under § 315(b), the Court also reviews whether the Board acted arbitrarily and capriciously or without observance of procedure required by law in reaching its decision. 5 U.S.C. § 706(2). The Board acted arbitrarily and capriciously both when it denied Achates discovery on the issue of the Board's authority, and then when it reasoned its conclusion from the sample SDK agreement instead of the actual agreements between Apple and its co-defendants.

1. The Board Arbitrarily and Capriciously Denied Discovery

During the Preliminary Proceedings, Achates showed that agreements likely existed between Apple and its co-defendants. Achates submitted with its Preliminary Response evidence that co-defendants sold apps on Apple's App Store.

(A5022-5032). Achates also submitted a sample SDK agreement from Apple, which included indemnity, defense, and hold harmless provisions related to patent infringement. (A5000).

The sample SDK agreement indicated that the co-defendants selling apps on Apple's App Store likely entered a substantive legal relationship with Apple concerning accusations of infringement of the '403 patent including provisions controlling duties to defend and indemnify. Achates asked the Board to allow discovery of the actual legal relationships memorialized in all of Apple's agreements with its co-defendants. (A166).

In petitioning for the inter partes review, Apple put its legal relationships at issue. It did so implicitly by requesting that the Board exercise authority under § 315(b) and explicitly by asserting - without any evidence - (i) that Apple was the only real party in interest and (ii) that neither Apple or a privy had been sued more than one year prior to the filing of the petition.

Although Apple never denied that the contracts existed, the Board repeatedly denied Achates any discovery of the Apple contracts. (A342-349; A408-409; A694-696). After the Board instituted the inter partes review, Apple admitted that it had one or more agreements with QuickOffice, but it continued to oppose discovery of the agreements. (A550; A695). The Board's refusal to grant

discovery of the agreements between Apple and its co-defendants, including the Apple-QuickOffice agreement, was unreasonable given Apple's assertions, and given that the "may not institute" proscription of § 315(b) would render the inter partes review ultra vires if Apple's co-defendants were real parties in interest or privies.

The regulations provide that the Board may order discovery if the moving party shows "that such additional discovery is in the interests of justice."

37 C.F.R. § 42.51(b)(2). Here, the relationship between Apple and its co-defendants pertained to the very authority of the Board to conduct the proceeding, and so the interests of justice were paramount.

In other inter partes review proceedings, the Board has granted discovery of indemnity agreements, because a legal relationship bears heavily on the issue of privity and real-party-in-interest. *See Intel Corporation v. U.S. Int'l Trade Comm'n*, 946 F.2d 821 (Fed. Cir. 1991), rehearing denied (Oct. 24, 1991). For example, in *General Electric Company v. Transdata, Inc.*, IPR2014-01380, Paper 15, November 12, 2014, the Board granted discovery of an indemnity agreement pertaining to General Electric Company and an ongoing litigation arising from the challenged patent. (A6886-A6897).

The Board's reasoning in *General Electric Company* starkly contrasts with the Board's reasoning in this IPR. In *General Electric Company*, the Board noted that “[a] party seeking additional discovery need not prove its contention as a prerequisite for obtaining the additional discovery.”

In this matter, however, the Board rejected Achates discovery request because Achates failed to persuade the Board “that the [indemnification] provision would be indicative of the co-defendants being real parties-in-interest or privies of Apple.” (A346). Furthermore, the Board was unconvinced that discovery was “likely to uncover information useful to the instant proceedings.”

The evidence and argument presented by Achates amount to only a mere allegation and speculation that one or more of the co-defendants are real parties-in-interest or privies of Apple, and do not convince us that the requested additional discovery is likely to uncover information useful to the instant proceedings.

(A348).

Like Apple in this case, the petitioner in *General Electric Company* opposed discovery because, in its view, the existence of the agreement could not give rise to privity. The Board in *General Electric Company* rejected the argument and reasoned that the Board could not weigh the facts in advance of seeing the evidence. *General Electric Company*, Paper 15 at 6. (A6891).

The Board in *General Electric Company* also made the common sense observation that requiring the Patent Owner to prove its contention to obtain discovery deprives the patent owner of procedural protections:

The parties are free to argue what they believe to be the appropriate inferences from the facts. At this juncture, we do not weigh the facts to determine the likelihood that Petitioner and OG&E have a privity relationship. Doing so would place Patent Owner in the precarious situation of having the burden to prove its contention in order to seek the evidence that supports that contention.

General Electric Company, Paper 15 at 6. (A6891).

Placing the Patent Owner in a “precarious situation” are other words for arbitrary or capricious, just as weighing the facts before seeing the evidence is arbitrary or capricious. *See also Arris Group, Inc. v. C-Cation Technologies, LLC*, IPR2014-00746, Paper 15 (July 24, 2014) (Board grants discovery of an indemnity agreement). (A6898-A6903).

The Board in this IPR weighed the facts before seeing Apple’s agreements and arrived at its decision arbitrarily and without observing procedures required by its own regulations. The Board’s subsequent review and analysis of the sample SDK agreement for its factual justification of its authority under § 315(b) demonstrates the relevance and significance of the discovery sought by Achates. The Board should have granted Achates the discovery so that it could have analyzed Apple’s actual agreements with its co-defendants. The denial of this

discovery was an abuse of discretion, and, therefore, the Court should vacate the Final Written Decision.

2. The Board Arbitrarily and Capriciously Relied On An Agreement It Determined Was Not Evidence to Support Its Authority Under § 315(b)

The Board compounded its error in denying Achates discovery of Apple's actual agreements with its co-defendants by relying on the sample SDK agreement to justify its fact-finding. Initially, the Board determined that the sample SDK agreement was not indicative of a legal relationship between Apple and its co-defendants because Achates could not prove that it was signed:

We first note that Patent Owner provides no proof that any of the co-defendants in the related litigation ever signed the SDK agreement. Patent Owner only provides evidence that “[a]t least defendants Electronic Arts, QuickOffice, and Symantec” sold applications through the Apple App Store. *Id.* at 10 (citing Exs. 2008-10). The fact that these co-defendants sold applications through the Apple App Store does not demonstrate that they signed the specific SDK agreement cited by Patent Owner (Ex. 2006).

(A369).

But instead of ordering production of the actual signed contracts or dismissing Apple's petition for lack of authority, the Board treated the sample SDK agreement as if it stated the actual legal relationship between Apple and its co-defendants. (A366-373). The Board then arbitrarily based its decision on

material the Board already deemed was not evidence of Apple's relationship to its co-defendants. (A366-373).

The existence of a QuickOffice and Apple contractual relationship was undisputed when the Board wrote the Final Decision. It was also undisputed that QuickOffice had been sued more than one year before the filing of the petition, that Apple was unwilling to disclose the QuickOffice agreement, and that Apple was working very hard to keep the agreement(s) from Achates and the Board. Nevertheless, the Board based its Final Written Decision on the same faulty reasoning as the Decision to Institute the IPR and relied on the same sample SDK agreement that the Board considered insufficient to justify discovery because Achates did not prove any co-defendant executed the agreement. Deriving its fact determinations from a sample SDK agreement the Board considered to be non-evidence is arbitrary or capricious. (A9-13). Therefore, this Court should vacate the Final Written Decision.

VI. CONCLUSION AND RELIEF REQUESTED

For the reasons given above, Achates requests that this Court vacate the Final Written Decision and mandate dismissal of the Petition. Each of the reasons separately warrants vacating the Board's final decision. The fact determinations concerning privy and real party in interest lack substantial evidence. Because the

Board misinterpreted § 315(b) and the Patent Office regulations, it erroneously put (and kept) the burden of proving the Board's lack of authority on Achates. Then the Board throughout the proceedings arbitrarily and capriciously denied Achates discovery of Apple's agreements with its co-defendants. Having refused to accept any evidence on the issues, the Board erroneously justified fact findings on a sample SDK agreement that it had previously determined did not indicate the legal relationships between Apple and its co-defendants who sold apps on the Apple App Store. The resulting final decision was therefore ultra vires, and should be vacated.

The Court's mandate should be dismissal of the Petition because the Petition must itself demonstrate the evidence to support the Board's authority to institute an IPR. Apple's petition fails to make the showing and should be dismissed.

December 8, 2014

/s/ Brad Pedersen
BRAD PEDERSEN
PATTERSON THUENTE PEDERSEN, P.A.
80 South Eighth Street, Suite 4800
Minneapolis, MN 55402
Telephone: 612-349-5740
Facsimile: 612-349-9266

Counsel for Appellant

CERTIFICATE OF COMPLIANCE

I hereby certify that the foregoing BRIEF OF APPELLANT ACHATES
REFERENCE PUBLISHING, INC.:

1. complies with the type-volume limitation of FED. R. APP.

P. 32(a)(7)(B). This brief contains 8,827 words, excluding the parts of
the brief exempted by FED. R. APP. P. 32(a)(7)(B)(iii) and FED. CIR.

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Date: December 8, 2014

/Brad D. Pedersen/

CERTIFICATE OF SERVICE

I hereby certify that on December 3, 2014, a true and correct copy of the foregoing Corrected Brief of Appellant Achates Reference Publishing, Inc. was served on all counsel of record through the appellate CM/ECF system.

December 8, 2014

/s/ Brad Pedersen

BRAD PEDERSEN

PATTERSON THUENTE PEDERSEN, P.A.

80 South Eighth Street, Suite 4800

Minneapolis, MN 55402

Telephone: 612-349-5740

Facsimile: 612-349-9266

Counsel for Appellant

Trials@uspto.gov
571-272-7822

Paper 90
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.
Petitioner

v.

ACHATES REFERENCE PUBLISHING, INC.
Patent Owner

Case IPR2013-00080
Patent 6,173,403 B1

Before HOWARD B. BLANKENSHIP, JUSTIN T. ARBES, and
GREGG I. ANDERSON, *Administrative Patent Judges*.

ARBES, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

Case IPR2013-00080
Patent 6,173,403 B1

I. BACKGROUND

Petitioner Apple Inc. (“Apple”) filed a Petition (Paper 2) (“Pet.”) seeking *inter partes* review of claims 1-12 and 17-19 of U.S. Patent No. 6,173,403 B1 (“the ’403 patent”) pursuant to 35 U.S.C. §§ 311-19. On June 3, 2013, we instituted an *inter partes* review of claims 1-12 and 17-19 on six grounds of unpatentability (Paper 22) (“Dec. on Inst.”).

Patent Owner Achates Reference Publishing, Inc. (“Achates”) filed a Patent Owner Response (Paper 39) (“PO Resp.”), which included a statement of material facts. Apple filed a Reply (Paper 58) (“Pet. Reply”) and a response (Paper 59) (“Pet. SOF Resp.”) to the statement of material facts.

Achates filed a Motion to Exclude¹ (Paper 69) (“Mot. to Exclude”) certain testimony and evidence submitted by Apple in the proceeding, and included a statement of material facts. Apple filed an Opposition to the Motion to Exclude (Paper 70) (“Exclude Opp.”) and a response (Paper 71) (“Exclude SOF Resp.”) to the statement of material facts. Achates filed a Reply (Paper 72) (“Exclude Reply”).

Apple filed a Motion for Observation (Paper 74) (“Obs.”) on certain email communications (Exhibits 1067 and 1068) between Achates’s two declarants, Mr. Dmitry Radbel and Dr. Xin Wang. Achates filed a response (Paper 79) (“Obs. Resp.”). Achates also filed a Motion to Seal (Paper 78) (“Mot. to Seal”) the email communications, and Apple filed an opposition (Paper 84) (“Seal Opp.”).

¹ Achates’s original motion was improper, and Achates was permitted to re-file its motion. *See* Paper 68.

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An oral hearing was held on February 26, 2014, and a transcript of the hearing is included in the record (Paper 89) (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6(c). This final written decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73.

For the reasons that follow, we determine that Apple has shown by a preponderance of the evidence that claims 1-12 and 17-19 of the ’403 patent are unpatentable.

A. The ’403 Patent

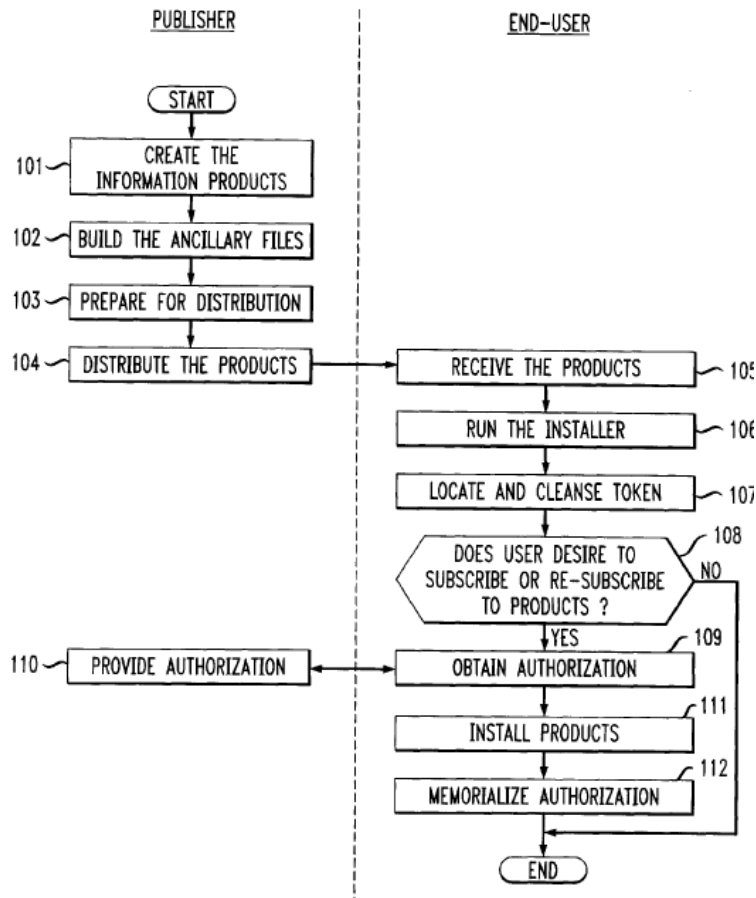
The ’403 patent² relates to “distributing and installing computer programs and data.” Ex. 1039, col. 1, ll. 10-13. The ’403 patent describes a need in the art to prevent piracy of information products, such as, for example, when a user obtains a computer program improperly or when a user purchases one copy of a program and installs it on multiple computers without authorization. *Id.* at col. 1, ll. 16-64. The ’403 patent discloses methods of “distributing one or more information products together . . . while reserving to the publisher the ability to control which products are actually installed on an end-user’s computer.” *Id.* at col. 2, ll. 2-7.

² The ’403 patent is a continuation-in-part of U.S. Patent Application No. 08/845,805, which issued as U.S. Patent No. 5,982,889 (“the ’889 patent”). The ’889 patent is the subject of related Case IPR2013-00081.

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Figure 1 of the '403 patent, reproduced below, depicts the interaction between a publisher and end-user (e.g., an individual purchasing a piece of software).



As shown in Figure 1, in steps 101-102, the publisher creates a set of information products and other files. *Id.* at col. 3, ll. 32-38; col. 5, ll. 29-34. The '403 patent describes a “plurality of web pages that constitute some of the legislative, administrative and judicial materials associated with patent law,” where the web pages include hyperlinks to each other, as an exemplary information product. *Id.* at col. 2, l. 64-col. 3, l. 1; col. 4, ll. 4-9. In step 103, the publisher encrypts the information products with a string as the encryption key. *Id.* at col. 7, ll. 33-42. In step 104, the information products are distributed to the end-user (e.g., on a CD-ROM or electronically over the

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Internet) along with an “installer” program that runs on the end-user’s computer and allows the publisher to “control how and under what circumstances the information products are installed on the end-user’s computer.” *Id.* at col. 2, ll. 37-47; col. 7, ll. 61-67. The installer knows the cryptosystem and key for decrypting the information products. *Id.* at col. 7, ll. 53-57.

In steps 105-106, the end-user receives the information products and runs the installer. *Id.* at col. 8, ll. 1-12. In step 107, the installer checks to see whether the end-user’s computer has a previously-stored, encrypted “token” indicating that the publisher granted authorization earlier to install the information products (e.g., when an end-user has a subscription to receive multiple products over time). *Id.* at col. 8, ll. 13-27. In step 108, the end-user is asked whether he or she wants to subscribe to the information products. *Id.* at col. 9, ll. 51-57. If so, in steps 109-110, the end-user “acquires the installer’s cooperation to decrypt and install the respective information products” by transmitting information to the publisher, receiving a “launch code” from the publisher in response, and entering the “launch code” into the installer. *Id.* at col. 9, l. 58-col. 10, l. 4; Fig. 4. Specifically, the end-user contacts the publisher (e.g., via telephone or the Internet) and provides (1) the end-user’s name and address; (2) the end-user’s method of payment; (3) the name of the requested information products; and (4) a serial number R generated by the installer. *Id.* at col. 10, ll. 5-28.

After verifying the payment, the publisher provides to the end-user a “launch code” comprising “(1) an authentication code; (2) an indicium of the name of the end-user; (3) a list of the information products to which the end-user has been granted access; and (4) an indicium of when the

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authorization for each information product expires,” encrypted using R as the key. *Id.* at col. 10, ll. 29-44. The end-user enters the launch code into the installer, and the installer decrypts the launch code using R as the key to extract the authentication code contained therein. *Id.* at col. 10, ll. 42-49. If the authentication code matches what the installer expects, the launch code is authentic. *Id.* at col. 10, ll. 45-60; col. 11, ll. 16-37. The information products can be installed in step 111 and, if necessary, the encrypted “token” on the end-user’s computer is updated in step 112 (the “token” contains the same four pieces of information as the launch code). *Id.*; col. 8, ll. 36-43. By generating a new R each time the installer requests a launch code, the disclosed method “prevent[s] the end-user from using a single launch code to install the information products on multiple computers.” *Id.* at col. 10, ll. 61-64.

B. Illustrative Claims

Claims 1 and 17 of the ’403 patent are the only independent claims at issue:

1. A method comprising:
 - receiving an encrypted launch code;
 - decrypting said encrypted launch code with a string, R, as the key to recover a first candidate authentication code and an indicium of a first information product; and
 - installing said first information product onto said computer when said candidate authorization code matches a first known authorization code.

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17. A method comprising:
 - reading an encrypted token from a computer;
 - decrypting said encrypted token with a string, T, as the key to recover a token that comprises an indicium of a first information product;
 - modifying said token to comprise an indicium of a second information product;
 - encrypting said token with said string, T, as the key to create a newly encrypted token; and
 - storing said newly encrypted token on said computer.

C. Prior Art

The pending grounds of unpatentability in this *inter partes* review are based on the following prior art:

1. U.S. Patent No. 5,864,620, filed Apr. 24, 1996, issued Jan. 26, 1999 (“Pettitt”) (Ex. 1006);
2. U.S. Patent No. 5,933,497, filed Jan. 29, 1993, issued Aug. 3, 1999 (“Beetcher”) (Ex. 1007) (claims priority to U.S. Patent Application No. 07/629,295, filed Dec. 14, 1990);
3. U.S. Patent No. 5,949,876, filed Jan. 8, 1997, issued Sept. 7, 1999 (“Ginter”) (Ex. 1005) (claims priority to U.S. Patent Application No. 08/388,107, filed Feb. 13, 1995); and
4. U.S. Patent No. 6,134,324, filed May 29, 1997, issued Oct. 17, 2000 (“Bohannon”) (Ex. 1008) (claims priority to U.S. Patent Application No. 07/739,206, filed July 31, 1991).

D. Pending Grounds of Unpatentability

This *inter partes* review involves the following grounds of unpatentability:

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Reference(s)	Basis	Claim(s)
Pettitt	35 U.S.C. § 102(e)	1
Pettitt and Beetcher	35 U.S.C. § 103(a)	2, 4, 5, 7, and 9
Beetcher	35 U.S.C. § 102(e)	17-19
Beetcher, Ginter, and Bohannon	35 U.S.C. § 103(a)	1-12
Ginter	35 U.S.C. § 102(e)	1-7, 9-12, and 17-19
Ginter and Beetcher	35 U.S.C. § 103(a)	8

II. ANALYSIS

A. Claim Interpretation

In the Decision on Institution, we interpreted various claim terms of the '403 patent as follows:

Term	Interpretation
“authentication code” (claim 1)	a code for authenticating data
“candidate authorization code” (claim 1)	candidate authentication code
“known authorization code” (claim 1)	known authentication code
“installing” (claim 1)	placing in a position so as to be ready for use
“launch code” (claim 1)	password
“token” (claims 4 and 17)	a data structure indicating that an end-user’s computer is granted access to certain information products

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Dec. on Inst. 8-14. The parties agree with these interpretations, *see* PO Resp. 1, and we incorporate our previous analysis for purposes of this decision.

B. Section 315(b)

Achates argues in its Patent Owner Response that Apple’s Petition is time-barred under 35 U.S.C. § 315(b), which provides that an *inter partes* review may not be instituted based on a petition “filed more than 1 year after the date on which the petitioner, real party in interest, or privy of the petitioner is served with a complaint alleging infringement of the patent.” PO Resp. 46-52. Achates contends that QuickOffice, Inc. (“QuickOffice”), one of Apple’s co-defendants in *Achates Reference Publishing, Inc. v. Symantec Corp.*, Case No. 2:11-cv-00294-JRG-RSP (E.D. Tex.) (“the related litigation”), was served with a complaint alleging infringement of the ’403 patent on June 20, 2011—more than one year before December 14, 2012, the filing date of the Petition in this proceeding. PO Resp. 46, 57. Achates made a substantially similar argument in its Preliminary Response, and we concluded that the Petition was not time-barred. *See* Paper 14 at 6-21; Dec. on Inst. 14-21. We reach the same conclusion now.³

Whether a non-party is a “privy” for purposes of an *inter partes* review proceeding is a “highly fact-dependent question” that takes into account how courts generally have used the term to “describe relationships and considerations sufficient to justify applying conventional principles of estoppel and preclusion.” Office Patent Trial Practice Guide, 77 Fed. Reg.

³ Also, in an earlier Order, we denied Achates’s request for additional discovery on the Section 315(b) issue. Paper 18.

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48,756, 48,759 (Aug. 14, 2012) (“Trial Practice Guide”). Whether parties are in privity depends on whether the relationship between a party and its alleged privy is “sufficiently close such that both should be bound by the trial outcome and related estoppels.” *Id.* Depending on the circumstances, a number of factors may be relevant to the analysis, including whether the non-party “exercised or could have exercised control over a party’s participation in a proceeding” or whether the non-party is responsible for funding and directing the proceeding. *Id.* at 48,759-60. We also find guidance in the Supreme Court’s decision in *Taylor v. Sturgell*, 553 U.S. 880 (2008), which sets forth the general rule under federal common law that a person not a party to a lawsuit is not bound by a judgment in that suit, subject to certain exceptions, including the following:

[N]onparty preclusion may be justified based on a variety of pre-existing “substantive legal relationship[s]” between the person to be bound and a party to the judgment. Qualifying relationships include, but are not limited to, preceding and succeeding owners of property, bailee and bailor, and assignee and assignor. These exceptions originated “as much from the needs of property law as from the values of preclusion by judgment.”

553 U.S. at 894 (citations omitted); *see* Trial Practice Guide at 48,759 (citing *Taylor*).

Achates contends that QuickOffice had a pre-existing substantive legal relationship with Apple and, therefore, is a privy of Apple under *Taylor*. PO Resp. 46-52. In support of its position, Achates cites a publicly available software development kit (SDK) agreement that Apple allegedly enters into with iPhone application developers like QuickOffice. *Id.* at 48. The SDK agreement includes a clause requiring the developer to indemnify Apple for third party patent infringement claims:

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To the extent permitted by law, *You agree to indemnify, defend and hold harmless Apple, its directors, officers, employees, independent contractors and agents (each an “Apple Indemnified Party”) from any and all claims, losses, liabilities, damages, expenses and costs (including without limitation attorneys fees and court costs) (collectively “Losses”) incurred by an Apple Indemnified Party as a result of Your breach of this Agreement, a breach of any certification, covenant, representation or warranty made by You in this Agreement, any claims that Your Applications violate or infringe any third party intellectual property or proprietary rights, or otherwise related to or arising from Your use of the SDK, Your Application(s) or Your development of Applications.*

...

In no event may You enter into any settlement or like agreement with a third party that affects Apple’s rights or binds Apple in any way, without the prior written consent of Apple.

Ex. 2006 § 6 (emphasis added). According to Achates, the fact that co-defendant QuickOffice would be obligated to indemnify Apple for infringement claims against the “same accused instrumentality” (i.e., a QuickOffice application), and would be prevented from settling in the litigation without Apple’s consent, means that QuickOffice and Apple are in privity with each other. PO Resp. 47-52. Apple acknowledges that it entered into “at least one form of an agreement related to app[lication] development with [QuickOffice],” but does not admit that the agreement included the indemnification provision cited by Achates. Pet. SOF Resp. ¶¶ 129-30.

We first note that Achates provides no evidence that QuickOffice had any role in the filing or funding of the Petition in this proceeding, or that QuickOffice exercised control or could have exercised control over Apple’s

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participation in this proceeding. *See* Trial Practice Guide, 77 Fed. Reg. at 48,759. Achates's sole evidence is the indemnification language in the SDK agreement and the fact that Apple and QuickOffice were co-defendants.

Even assuming that the specific indemnification provision of the SDK agreement applies to QuickOffice (and Achates has not shown that it does), we are not persuaded that the provision is indicative of QuickOffice being a privy of Apple. The agreement does not give the developer the right to intervene or control Apple's defense to any charge of patent infringement, nor has Achates argued that to be the case for QuickOffice in the related litigation. Notably, indemnification is not one of the "substantive legal relationships" cited in *Taylor* (e.g., assignee-assignor), and is significantly different from those relationships, which involve successive interests in the same property.

Further, as Apple points out, Achates's actions in the related litigation refute its allegations of privity. *See* Pet. Reply 15. Achates accuses Apple of infringing the '403 patent based on Apple's own actions as well as those of QuickOffice, and likewise accused QuickOffice of infringement based on activities relating to the Apple App Store as well as other systems (e.g., the Amazon Appstore for Android). *See* Ex. 1037 ¶¶ 51-52; Ex. 1038 at 84-90. Achates also is continuing to assert the '403 patent against Apple in the related litigation even after settling with the co-defendant application developers, including QuickOffice. *See* PO Resp. 58. Thus, at least according to Achates, there is a distinct basis for liability against Apple, different from that against the developers. As such, it does not appear that Apple would be estopped by any judgment against the developers. For instance, even if a judgment were obtained against one or more of the

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developers, Apple would still be exposed to an adverse judgment based on its own actions and would assert its own defenses independent of the developers. This further indicates that the relationship between Apple and the developers, such as QuickOffice, is not of the type that would make the developers privies of Apple.

We are not persuaded that the Petition is time-barred under Section 315(b) on the basis that QuickOffice is a privy of Apple.

C. Credibility of Mr. Schneier

As an initial matter, Achates in its Patent Owner Response challenges the credibility of Apple's declarant, Bruce Schneier. PO Resp. 52-56. Mr. Schneier provided testimony regarding the '403 patent and the prior art in a declaration submitted with Apple's Petition. Ex. 1041.⁴ Achates argues that Mr. Schneier is not credible for two reasons. First, Mr. Schneier billed Apple for less than 45 hours of work, which is "nowhere near enough time to read and analyze all of the references cited in his declarations at the level of diligence that this proceeding requires," according to Achates. PO Resp. 52-54. For instance, Achates points to the size of Ginter (324 pages) and the declarations themselves (931 numbered paragraphs) to argue that Mr. Schneier "could not have performed his obligation to this matter conscientiously in the time spent." *Id.* Achates's estimate of 45 hours,

⁴ Apple submitted its Petition, and Exhibits 1003 and 1041 (declarations from Mr. Schneier regarding the '403 patent and related '889 patent), on December 14, 2012. In response to an instruction from Board administrative staff that documents should be in portrait rather than landscape orientation, Apple submitted revised copies on December 17, 2012, also numbered as Exhibits 1003 and 1041. *See* Paper 4. To ensure the clarity of the record, the original versions filed on December 14, 2012 will be expunged.

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however, is based on an estimate from Mr. Schneier as to the total amount Mr. Schneier *billed* to Apple. Ex. 1045 at 63:15-24; *see* PO Resp. 53. Achates does not point to any statement from Mr. Schneier regarding the number of hours he actually spent reviewing the prior art and performing the analysis in his declaration. Mr. Schneier testified that he read the prior art references at issue (Ginter, Pettitt, Beetcher, and Bohannon) multiple times and fully understood them. Ex. 1045 at 76:16-22, 77:21-78:5. Moreover, Achates's contention is not that Mr. Schneier lacks knowledge of the prior art or did not in fact perform the analysis in his declaration—just that Mr. Schneier did not spend sufficient time on the matter. We decline Achates's invitation to give Mr. Schneier's testimony less weight on that basis.

Second, Achates argues that Mr. Schneier has “hostility towards the patent system” and is a member of the Electronic Frontier Foundation (EFF), which shows a “level[] of bias that should be more than sufficient to raise concerns about his qualifications to serve as an unbiased technology expert.” PO Resp. 54-56 (citing a book co-authored by Mr. Schneier, Ex. 2016, and various EFF web pages, Exs. 2017-2020). We have reviewed Mr. Schneier's curriculum vitae (Exhibit 1004) and find that he is well qualified to testify regarding the matters addressed in his declaration (Exhibit 1041). Indeed, Achates's declarant, Mr. Radbel, testified that Mr. Schneier is a “top cryptologist” and has a “great reputation as a cryptologist.” Ex. 2032 at 167:9-25. As explained herein, we find Mr. Schneier's testimony persuasive and give it substantial weight. We do not give it less weight based on a purported bias against patents in general.

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D. Level of Ordinary Skill in the Art

In its Petition, Apple contends that a person of ordinary skill in the art at the time of the '403 patent (April 1997, when the application that issued as the parent '889 patent was filed) would have had “extensive familiarity with cryptographic techniques published in the literature and known in the field,” and “would have gained this level of familiarity through graduate level studies in mathematics, engineering or computer science, or through work experience in academia (either as a professor or a graduate student), for a technology company or for a government,” relying on the testimony of Mr. Schneier. Pet. 4 (citing Ex. 1041 ¶¶ 37-39). Achates does not dispute this argument in its Patent Owner Response.⁵ Mr. Radbel, however, concludes that a person of ordinary skill in the art would have had “the ability to select and make use of well-known cryptographic techniques at a high level,” but not “comprehensive knowledge of cryptography, including Mr. Schneier’s book on the subject.” Ex. 2013 ¶¶ 17, 19. Mr. Radbel further testifies that a person of ordinary skill in the art would have had “an undergraduate degree in engineering or computer science plus two years of experience in software engineering,” but not necessarily “graduate level training.” *Id.* Dr. Wang agrees with Mr. Radbel’s assessment of the level of ordinary skill. Ex. 2014 ¶ 8.

⁵ Achates argued in its Preliminary Response that “the proper level of skill should be a person with at least five years of experience and[/]or academic training in professional software development having experience with client-server software and operating systems, and at least a basic working knowledge of computer security and cryptography.” Paper 14 at 23.

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The parties' declarants appear to agree that the person of ordinary skill in the art would have been familiar with the basic cryptographic techniques of the time, but dispute the depth of that knowledge. A skilled artisan would have been aware of basic cryptographic techniques and also the predominant literature on cryptography of the time. *See In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) ("The person of ordinary skill in the art is a hypothetical person who is presumed to know the relevant prior art."). As to that person's level of education or equivalent experience, we are persuaded that Mr. Radbel understates the appropriate level of skill. The '403 patent describes various problems with software piracy and various technical solutions to such problems. Ex. 1039, col. 1, ll. 16-63. It also assumes a fairly deep knowledge of encryption, decryption, and the use of keys for performing those functions. *See id.* at col. 7, l. 32-col. 11, l. 37. Contrary to Mr. Radbel's assertion that a person of ordinary skill only would have needed a "high level" knowledge of cryptographic techniques, sufficient, for example, to call software routines "without necessarily understanding how such routines work," *see* Ex. 2013 ¶ 17, a skilled artisan would need some knowledge of how the cryptographic techniques work to choose the appropriate techniques and properly use them. We also take into account the sophistication of the technology at the time, as exemplified by the prior art references of record and Mr. Schneier's book from 1996 (Exhibit 1024). Based on all of the evidence, we conclude that a person of ordinary skill in the art at the time of the '403 patent would have been familiar with the basic cryptographic techniques and literature of the time, and would have had some graduate-level or equivalent experience working with such techniques.

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E. Grounds Based on Pettitt

With respect to the alleged grounds of unpatentability based on Pettitt, we have reviewed Apple's Petition, Achates's Patent Owner Response, and Apple's Reply, as well as the evidence discussed in each of those papers. We are persuaded, by a preponderance of the evidence, that claim 1 is anticipated by Pettitt under 35 U.S.C. § 102(e), and claims 2, 4, 5, 7, and 9 are unpatentable over Pettitt and Beetcher under 35 U.S.C. § 103(a).

1. Pettitt

Pettitt discloses a system for “controlling distribution of software in a multitiered distribution chain” and “distinguishing authorized users from unauthorized users.” Ex. 1006, col. 1, ll. 7-10. Figure 2 of Pettitt is reproduced below.

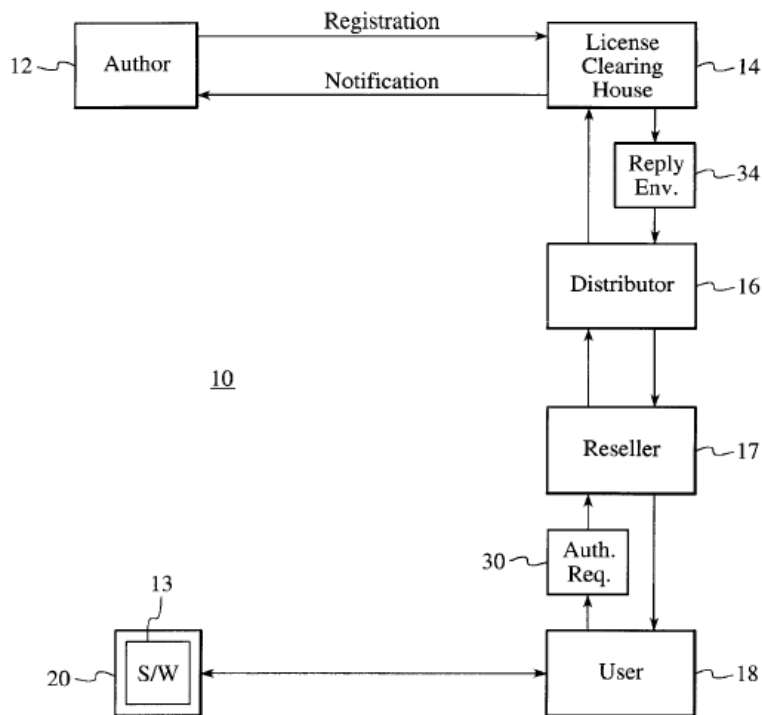


FIG. 2

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Figure 2 depicts the entities involved in providing software 13: author 12, license clearing house (LCH) 14, distributor 16, reseller 17, and user 18. Software 13 is packed into a digital shipping container 20, encrypted with a master key, and provided to user 18 (e.g., sold by reseller 17 to the public). *Id.* at col. 3, ll. 28-56. To purchase a license and unlock the container, user 18 sends authorization request 30, which includes information identifying the software, user, and desired method of payment. *Id.* at col. 4, ll. 10-19. The distribution entities communicate with each other to validate the user's payment and authorize the transaction. *Id.* at col. 4, ll. 20-62. If authorized, LCH 14 creates a reply envelope 34 including:

1. information identifying the software,
2. information identifying the user,
3. the digital signature of the reseller,
4. the digital signature of the distributor,
5. a master key that unlocks the software container 20 (if the transaction has been authorized), and
6. a digital authorization certificate.

Id. at col. 4, l. 63-col. 5, l. 5.

LCH 14 encrypts the contents of the reply envelope with the reseller's public key and "digitally signs the envelope with the signature of LCH 14 by hashing the contents of the reply envelope and encrypting the result of the hash with the LCH's private key." *Id.* at col. 5, ll. 14-24. LCH 14 then sends the reply envelope back through the distribution chain. *Id.* at col. 5, ll. 24-28. Reseller 17 authenticates the digital signature, decrypts the reply envelope using the reseller's public key, and sends the contents of the reply envelope to user 18. *Id.* at col. 5, ll. 45-55. User 18 then "uses the authorization certificate and the master key to unlock the software container

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20 and install the software.” *Id.* at col. 5, ll. 56-63. Because the digital authorization certificate is derived from the user’s information and, therefore, is different for each user, possession of the digital authorization certificate is “the user’s proof of purchase, and proof that s/he is an authorized user.” *Id.* at col. 5, ll. 58-63.

2. Claim 1 is Anticipated by Pettitt

Pettitt discloses receiving and decrypting an encrypted “launch code” (the reply envelope) with a “string, R” (the reseller’s public key) to recover an “indicium of a first information product” (information identifying the software), and installing the first information product, as recited in claim 1. *See* Pet. 26-28. Achates does not argue these limitations of claim 1, but contends that Pettitt fails to disclose “decrypting said encrypted launch code . . . to recover a first candidate authentication code.” PO Resp. 3-9. Achates argues that the LCH digital signature, cited by Apple in the Petition as a “first candidate authentication code,” is not recovered by decrypting the reply envelope because (1) the LCH digital signature is not included within the reply envelope, (2) the LCH digital signature is available to the reseller before and independently of the decryption of the reply envelope, and (3) the reply envelope is encrypted before the LCH digital signature of the reply envelope is created. *Id.*

Apple responds that it identified two “first candidate authentication codes” in Pettitt in its Petition—the LCH digital signature and the digital authorization certificate—and Achates overlooks the latter. Pet. Reply 1-2. The primary structure identified by Apple in the Petition is the LCH digital signature, *see, e.g.*, Pet. 27, and we referenced the LCH digital signature in

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summarizing Apple’s allegations in the Decision on Institution, Dec. on Inst. 28. Achates argued at the oral hearing that Apple improperly asserted that the digital authorization certificate was a “first candidate authentication code” for the first time in its Reply, and that the “ground” of unpatentability for this trial is based on the LCH digital signature alone. *See* Tr. 30:17-32:6.

We agree with Apple, however, that the Petition sufficiently identified each of the digital authorization certificate and the LCH digital signature as a “first candidate authentication code.” Apple included, as part of the document identified as its Petition, a statement of material facts, two of which are:

80. The digital signature of the LCH described in Pettitt is an “authentication code” within Patent Owner’s construction of the ’403 claims. Ex. 1041 at ¶ 446.

81. The digital authorization certificate described in Pettitt is an “authentication code” within Patent Owner’s construction of the ’403 claims. Ex. 1041 at ¶ 447.

Pet., Attachment C ¶¶ 80-81; *see also* 37 C.F.R. § 42.24(a)(1) (statements of material facts, although not required, count against the page limit for the petition). Apple explains in the Petition that the reply envelope includes “information identifying the software, the user, the digital signature of the LCH and a digital authorization certificate,” and that the reply envelope is decrypted and its contents passed to the user for unlocking the software product. Pet. 26-27. Apple further cites Mr. Schneier’s testimony that the digital authorization certificate is an “authentication code” included in the reply envelope. *See* Pet. 26-27; Ex. 1041 ¶¶ 440-41, 447. The applicable ground of unpatentability in this *inter partes* review is the alleged anticipation of claim 1 by Pettitt, based on the allegations of unpatentability in the Petition. Dec. on Inst. 35-36. It is those allegations to which Achates

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responded in its Patent Owner Response. *See* 37 C.F.R. § 42.120(a) (a “patent owner may file a response to *the petition*” (emphasis added)). Indeed, Achates denied the two statements of material fact above when it filed its Preliminary Response. Paper 17 at 34. Thus, we consider Apple’s assertion of the digital authorization certificate as a “first candidate authentication code.”

We are persuaded that Pettitt’s decryption of the reply envelope to recover the digital authorization certificate constitutes “decrypting said encrypted launch code . . . to recover a first candidate authentication code,” as recited in claim 1. *See* Pet. 26-27; Ex. 1041 ¶ 447. As explained above, we interpret “authentication code” to mean “a code for authenticating data.” *See supra* Section II.A. The digital authorization certificate is generated by hashing the other five items identified in Pettitt as being part of the reply envelope and encrypting the result with the private key of the LCH. Ex. 1006, col. 5, ll. 6-8. Therefore, the digital authorization certificate is a digital signature, and a function of a digital signature is to authenticate data, as Dr. Wang agrees. *See* Ex. 2034 at 254:15-21, 257:17-23. Pettitt specifies that the digital authorization certificate is “use[d]” to unlock the software container and install the software. Ex. 1006, col. 5, ll. 56-58. Specifically, the user would validate the digital authorization certificate by decrypting the originally encrypted hash (e.g., with the LCH’s public key), generating a new hash from the same five elements used to create the original hash, and comparing the new and original hashes. *See* Pet. Reply 4; Ex. 2034 at 193:3-194:8, 263:10-15. Thus, the digital authorization certificate authenticates the data that has been “digitally signed” with it. Further, the digital authorization certificate is part of the encrypted reply envelope, and is

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recovered when the reply envelope is decrypted. Ex. 1006, col. 4, l. 63-col. 5, l. 8; col. 5, ll. 51-63 (“reseller 17 decrypts the reply envelope . . . and passes the contents onto the user 18”). Achates acknowledges in related Case IPR2013-00081 that the digital authorization certificate is part of the reply envelope and that the “reseller does *recover* the certificate by decrypting the encrypted reply envelope.” IPR2013-00081, Paper 36 at 23.⁶

We are persuaded, by a preponderance of the evidence, that Pettitt discloses all of the limitations of claim 1, including “decrypting said encrypted launch code . . . to recover a first candidate authentication code.”

3. Claims 2, 4, 5, 7, and 9 are Unpatentable Over Pettitt and Beetcher

We are persuaded by Apple’s arguments and supporting evidence that claims 2, 4, 5, 7, and 9, which depend from claim 1, are unpatentable over Pettitt and Beetcher. *See* Pet. 29-33; Ex. 1041 ¶¶ 475-503. For example, claim 2 recites decrypting the encrypted launch code to recover an indicium of a “second information product” and installing that “second information product” based on an authentication code match. Beetcher teaches the distribution of “multiple software modules on a single generic medium” where each customer receives a “unique entitlement key, enabling the customer to run only those software modules to which he is licensed.” Ex. 1007, col. 4, ll. 34-46; col. 6, ll. 20-40 (product entitlement flags 205, “each corresponding to a product number”). Apple persuasively shows that a person of ordinary skill in the art would have been able to modify the

⁶ Because we agree with Apple that the digital authorization certificate in Pettitt is a “first candidate authentication code” recovered by the decryption of a launch code, as recited in claim 1, we need not determine whether the LCH digital signature also is a “first candidate authentication code.”

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Pettitt system to allow for distribution, at once, of multiple software products, as taught by Beetcher, and would have had reason to do so. Pet. 29-30. Mr. Schneier testifies that a person of ordinary skill in the art would have had reason to “include a list of multiple indicia of information products in the same launch code, as doing so would more efficiently identify multiple information products for which the end-user was licensed.” Ex. 1041 ¶ 455.

Achates makes three arguments. First, as to all of the challenged dependent claims, Achates contends that Beetcher fails to cure the deficiency of Pettitt regarding recovery of a “first candidate authentication code,” as recited in claim 1. PO Resp. 9-10. For the reasons explained above, we find no such deficiency in Pettitt.

Second, Achates asserts that a person of ordinary skill in the art would not have had reason to combine the teachings of Pettitt and Beetcher to arrive at the methods of claim 2, 4, 5, 7, and 9. *Id.* at 10. Achates cites Dr. Wang’s declaration in support, but does not explain in its Patent Owner Response why it believes the references would not be combined. *See id.* (citing Ex. 2014 ¶¶ 63-68). We are persuaded by Mr. Schneier’s analysis regarding the alleged combination. *See* Ex. 1041 ¶¶ 475-503.

Third, as to claim 4 in particular, Achates argues that a person of ordinary skill in the art would not have had reason to combine Pettitt and Beetcher. PO Resp. 10-12. Claim 4 recites, *inter alia*, “creating a token,” “encrypting said token,” and “storing said encrypted token on said computer.” As explained above, we interpret “token” to mean “a data structure indicating that an end-user’s computer is granted access to certain information products.” *See supra* Section II.A. In the Petition, Apple

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contends that when the reseller in Pettitt decrypts the reply envelope, it recreates the unencrypted reply envelope and sends the contents of the reply envelope (a “token”) to the user. Pet. 30-32. The contents of the unencrypted reply envelope (e.g., the master key and digital authorization certificate) are stored in the memory of the user’s computer because they are used to unlock the software. *Id.* Apple further contends that although Pettitt does not teach encrypting the contents of the reply envelope in memory on the user’s computer, doing so would have been obvious based on Beetcher to “help protect the contents of the token from theft,” and also because Pettitt itself teaches encrypting the reply envelope at various stages for security. *Id.*; see Ex. 1041 ¶¶ 484-89 (citing Beetcher, Ex. 1007, col. 10, ll. 27-31, which teaches local storage of an encrypted entitlement key).

As to the combination of Pettitt and Beetcher, Achates contends that storing the encrypted software container and encrypted reply envelope on the user’s computer would not make sense because the encrypted reply envelope is encrypted with the public key of the reseller, so only the reseller, not the user, can decrypt it. PO Resp. 10-11 (citing Ex. 2014 ¶¶ 69-70). Pettitt, however, does not teach that the user ever receives the encrypted reply envelope. See Pet. Reply 3-4. Rather, the reseller decrypts the reply envelope and sends the *contents* to the user in unencrypted form. Ex. 1006, col. 5, ll. 51-55. Thus, it is the *contents* of the reply envelope that are stored on the user’s computer, and we agree that it would have been obvious based on Beetcher to encrypt those contents when they are stored there. Further, as Apple points out, claim 4 does not require that the encryption key used to create the token be the same as the encryption key used to create the launch code. See Pet. Reply 5. Thus, Achates’s assertion that the reply envelope

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would have to be encrypted again with the public key of the reseller is incorrect. The contents of the reply envelope (the “token”) could be encrypted with any encryption key (the “string, T”).

Achates also asserts that because the reseller sends the master key (along with the other contents of the reply envelope) to the user, there is no reason for the user to back up the reply envelope locally once the user has used the master key to install the software. PO Resp. 11-12 (citing Ex. 2014 ¶ 71). In addition, according to Achates, there is no need to save the encrypted reply envelope because the user can back up the software itself. *Id.* at 12 (citing Ex. 2014 ¶ 72). Again, Achates misstates Apple’s position, focusing on the encrypted reply envelope rather than the *contents* of the envelope that the user receives. In Pettitt, all of the contents are sent to the user, the master key and digital authorization certificate are used to unlock and install the software, and thereafter “the possession of the authorization certificate is the user’s proof of purchase, and proof that s/he is an authorized user.” Ex. 1006, col. 5, ll. 56-63. Thus, there are reasons for the user in Pettitt to store the token, including the digital authorization certificate, locally—namely, to install and unlock the software and provide proof of purchase. *See* Pet. Reply 4; Ex. 1041 ¶¶ 463, 489-90.

We also note that Achates does not dispute the underlying reasons provided by Mr. Schneier for why a person of ordinary skill in the art would have combined the teachings of Pettitt and Beetcher in the manner proposed. Mr. Schneier testifies that encrypting locally stored tokens was well known at the time and that a skilled artisan would have had reason to encrypt the token in Pettitt to ensure its security. Ex. 1041 ¶¶ 485-88. Dr. Wang agrees that it generally is a good practice to encrypt a file stored in nonvolatile

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storage to “protect the confidentiality of the file.” Ex. 2035 at 395:3-15, 400:1-6. We give Mr. Schneier’s analysis regarding the combination of Pettitt and Beetcher substantial weight, and conclude that Apple has shown ““some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”” *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 417-18 (2007) (citation omitted).

We are persuaded, by a preponderance of the evidence, that claims 2, 4, 5, 7, and 9 would have been obvious over Pettitt and Beetcher.

4. Conclusion

Based on the record evidence, in light of the arguments presented, Apple has shown, by a preponderance of the evidence, that claim 1 is anticipated by Pettitt, and claims 2, 4, 5, 7, and 9 are unpatentable over Pettitt and Beetcher.

F. Grounds Based on Beetcher

With respect to the alleged grounds of unpatentability based on Beetcher, we have reviewed Apple’s Petition, Achates’s Patent Owner Response, and Apple’s Reply, as well as the evidence discussed in each of those papers. We are persuaded, by a preponderance of the evidence, that claims 17-19 are anticipated by Beetcher under 35 U.S.C. § 102(e), and claims 1-12 are unpatentable over Beetcher, Ginter, and Bohannon under 35 U.S.C. § 103(a).

Beetcher discloses a system for “restricting the ability of a computer user to use licensed software in a manner inconsistent with the license.”

The diagram illustrates a data processing system architecture divided into two main sections: DISTRIBUTOR (top) and CUSTOMER (bottom), separated by a dashed line.

DISTRIBUTOR Section:

- DEVELOPMENT SYSTEM (125):** Contains a **COMPILER (126)** and a **TRANSLATOR (127)**.
- MARKETING SYSTEM (124):** Contains a **KEY GENERATOR/ENCRYPTOR (122)** and a **DATA-BASE (123)**.
- WAREHOUSE (120):** Receives data from the DEVELOPMENT SYSTEM.
- SALES OFFICE (121):** Connected to the MARKETING SYSTEM and the WAREHOUSE.

CUSTOMER Section:

- Input:** Data from the SALES OFFICE (via a telephone icon) and the WAREHOUSE (via a long arrow) feeds into a data stream **100110 . . . 10 (111)**.
- User Interaction:** A user (109) is shown at a terminal, interacting with the data stream.
- Computer System (101):** A central unit containing:
 - CPU (102)**
 - CONTROL STORE (103)**
 - RAM (104)**
 - SERIAL NO. (105)**
- Storage:** The computer system is connected to three disk drives labeled **106**, **107**, and **108**.
- Peripheral:** A device (110) with a display and a keypad is connected to the computer system.

FIG. 1

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information enabling system 101 to determine which software modules are entitled to execute on it.” *Id.* at col. 5, l. 65-col. 6, l. 7. The customer “load[s] the desired software modules from [software media 112 and] unit 110 into system 101, and store[s] the software modules on storage devices 106-108.” *Id.* at col. 6, ll. 11-15. Entitlement key 111 includes certain information, such as software version field 202, machine serial number field 204, and product entitlement flags 205, “each corresponding to a product number” for a product that the customer may be authorized to use. *Id.* at col. 6, ll. 20-40; Fig. 2. Entitlement key 111 is encrypted using a machine key derived from machine serial number 105. *Id.* at col. 5, ll. 44-50; col. 9, ll. 55-60.

The customer receives encrypted entitlement key 111 and enters it into the computer. *Id.* at col. 9, ll. 51-52. The customer’s computer then decodes encrypted entitlement key 111 using the machine key, stores the key in an encoded product key table, and stores the key and software version number in a product lock table. *Id.* at col. 6, l. 66-col. 7, l. 42. The encoded product key table and product lock table both are stored in random access memory (RAM), and the encoded product key table also is stored on a non-volatile storage device so that it can be recovered when the system is powered down and then re-initialized (i.e., the encoded product key table is persistent). *Id.* at col. 8, ll. 23-27, 43-46. Products are unlocked “on demand.” *Id.* at col. 10, ll. 20-39. “Upon first execution of a previously unentitled software product,” an unlock routine “fetches the encrypted entitlement key from the appropriate entry in [the] encoded product key table,” “obtains the machine key,” “decodes the entitlement key,” and sets the product lock table accordingly if the entitlement key indicates that the

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user is entitled to use the software. *Id.* Upon subsequent executions of the software product, the system checks the product lock table to determine if the software is entitled to execute. *Id.* at col. 10, ll. 48-62.

2. Claims 17-19 are Anticipated by Beetcher

As to independent claim 17, Apple contends that Beetcher discloses reading an encrypted “token” (the product key table), decrypting the encrypted token to recover a token comprising an “indicium of a first information product” (an entitlement flag authorizing use of a specific software product), modifying the token to comprise an “indicium of a second information product” (an entitlement flag authorizing use of another software product), encrypting the token again to create a “newly encrypted token” (the modified product key table after a new entitlement key is received), and storing the new token. Pet. 18-21, 24 (citing Ex. 1041 ¶¶ 420-32). Achates argues that Beetcher fails to disclose the encrypting step of claim 17 because the product key table is not encrypted again after it is modified with a new entitlement key. PO Resp. 33-35. As support, Achates points to paragraph 427 of Mr. Schneier’s declaration where he testifies that “[t]he storage of the product key table” satisfies the encrypting step. *Id.* at 34-35 (citing Ex. 1041 ¶ 427). Achates also cites Dr. Wang, who testifies that Beetcher only discloses storing, not encrypting, the product key table. *Id.* (citing Ex. 2014 ¶¶ 24-38).

We are persuaded that the encoded product key table is encrypted after it is updated with a new entitlement key. When a new entitlement key is received, it is treated as “a replacement key for all products it unlocks.” Ex. 1007, col. 9, ll. 66-67. The system decodes that entitlement key (using

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the machine key) and “rebuild[s]” the encoded product key table accordingly. *Id.* at col. 9, l. 55-col. 10, l. 5. The rebuilt encoded product key table then is saved in storage. *Id.* at col. 10, ll. 18-19. As Apple and Mr. Schneier point out, Beetcher explicitly describes the product key table as “encoded,” meaning that the product key table itself is encrypted with a key. *See* Pet. Reply 11; Pet., Attachment C ¶ 71; Ex. 1041 ¶ 387, 420, 426. Importantly, Beetcher uses “decode” and “decrypt,” and “encode” and “encrypt,” each interchangeably to refer to the same thing. For instance, Beetcher describes “us[ing] the machine key to decode the entitlement key 111 at step 903,” but lists step 903 in Figure 9a as “Decrypt Entitlement Key.” *See* Ex. 1007, col. 9, ll. 59-60, Fig. 9a; *see also id.* at col. 4, ll. 10-12 (“decrypt the entitlement key”); col. 8, ll. 60-62 (“decodes and stores entitlement key 111”); col. 10, ll. 27-31 (“decodes the entitlement key”). Dr. Wang agreed that Beetcher uses “decode” and “decrypt” interchangeably. Ex. 2034 at 327:21-328:1. Also, Figure 4 of Beetcher depicts “encoded product key table” 450 and “product lock table” 460, with only the former described as “encoded.” This is understandable, given that the encoded product key table is persistent and would require a greater level of protection.

We are persuaded, by a preponderance of the evidence, that Beetcher discloses all of the limitations of claim 17, including “encrypting said token with said string, T, as the key to create a newly encrypted token,” as well as all of the limitations of dependent claims 18 and 19, which Achates does not argue separately in its Patent Owner Response.

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3. Claims 1-12 are Unpatentable Over Beetcher, Ginter, and Bohannon

We are persuaded by Apple's arguments and supporting evidence that claims 1-12 are unpatentable over Beetcher, Ginter, and Bohannon. *See* Pet. 18-26; Ex. 1041 ¶¶ 308-419. As to claim 1, Apple contends that Beetcher discloses receiving and decrypting an encrypted "launch code" (the entitlement key) with a "string, R" (the machine key) to recover the software version number, machine serial number, and an "indicium of a first information product" (an entitlement flag). Pet. 18-19. Apple relies on Ginter for the "first candidate authentication code" limitation of claim 1, arguing that a person of ordinary skill in the art would have had reason to modify the Beetcher system to use a digital signature as taught by Ginter. *Id.* at 25. Apple relies on Bohannon for the "installing" limitation of claim 1, arguing that a person of ordinary skill in the art would have had reason to modify the Beetcher system to "require a user to input the entitlement key before copying the software onto the computer system" as taught by Bohannon. *Id.* at 26. In both cases, Apple cites the analysis of Mr. Schneier. *See* Ex. 1041 ¶¶ 331-37, 365-67.

Achates argues that claim 1 would not have been obvious based on the combination of Beetcher, Ginter, and Bohannon for four reasons. First, Achates argues that the references do not teach "decrypting said encrypted launch code . . . to recover a first candidate authentication code," as recited in claim 1, because Ginter's permissions record (PERC) does not include a digital signature that can be recovered by decrypting the PERC. PO Resp. 36-39. Ginter discloses receiving and decrypting a PERC, where one of the items included in the PERC may be a digital signature. *See* Pet. 9-10; Ex. 1041 ¶¶ 159, 162-66; Ex. 1005, col. 12, ll. 27-33. Figure 75D depicts

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user rights table (URT) 3160 as including a digital signature, and Ginter states that URT 3160 “may itself be a PERC 808.” Ex. 1005, col. 248, ll. 36-38, Fig. 75D. Thus, Achates’s factual assertion that the PERC in Ginter lacks a digital signature is not correct. *See* Tr. 47:24-48:5 (acknowledging the description of Figure 75D in Ginter). Mr. Radbel also acknowledged that the PERC could have a digital signature in the “particular construct” shown in Figure 75D. Ex. 2032 at 279:14-18.

Further, Achates’s argument is directed to Ginter individually, but Apple’s position regarding the recited “decrypting” step is premised on the combination of Beetcher and Ginter. Apple relies on Beetcher for the underlying teaching of decrypting an encrypted “launch code” (the entitlement key) to recover the software version number and machine serial number, and, because those two values are not authentication codes, relies on Ginter’s teaching of a digital signature within an encrypted “launch code” (the PERC). *See* Pet. 25; Ex. 1041 ¶¶ 331-37. Given Ginter’s teaching of a digital signature within a PERC, Achates does not explain sufficiently why the substitution proposed by Apple would not result in the recited “decrypting” step. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986) (“Non-obviousness cannot be established by attacking references individually where the rejection is based upon the teachings of a combination of references.”).

Second, Achates argues that a person of ordinary skill in the art in 1997 would not have been motivated to include a digital signature in the entitlement key of Beetcher. PO Resp. 41-43. Achates contends that “public key cryptography was patented and the owner of the dominant patent was known to be litigious and the cost of its licenses high,” citing a 1997

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article regarding U.S. Patent No. 4,405,829. *Id.* (citing Ex. 2015). Achates also points to the following testimony from Mr. Schneier:

Q. Does the fact that the digital signatures were all patents in the 1997 time frame create a motivation not to use digital signatures?

A. Of course.

Ex. 1046 at 484:5-9.

We first note that Mr. Schneier later testified during redirect examination that he “may have made a mistake” regarding the testimony cited above because at least one digital signature algorithm of the time was in the public domain. *Id.* at 494:4-495:7. Moreover, even assuming that Achates is correct, Achates’s argument is not that it would have been technically infeasible, or even technically difficult, for a person of ordinary skill in the art to use a digital signature in the context of Beetcher—just that the financial cost of doing so would have been high. We do not consider this to be a sufficient impediment to dissuade a skilled artisan from using digital signatures. Indeed, Mr. Schneier testifies that digital signatures were “widely used in April 1997” in systems analogous to that of Beetcher, and provides detailed reasons why a person of ordinary skill in the art would have wanted to use a digital signature. *See* Ex. 1041 ¶¶ 331-37. Achates gives no basis for believing that testimony to be incorrect.

Third, Achates argues that adding a digital signature to the entitlement key of Beetcher would frustrate Beetcher’s objective to have a “user-friendly entitlement key.” PO Resp. 43-45. Achates points to the following statements in Beetcher:

Encrypted entitlement key 111 is sent from the software distributor to the customer by mail, *telephone*, or other appropriate means. While it is possible to transmit the key

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electronically or on magnetic media such as a diskette, *the key is sufficiently brief that an operator can enter it into system 101 by typing the key on console 109.*

. . .

Although key 111 is shown in FIG. 1 as a plurality of binary bits, it may be presented to the customer in some other form, such as hexadecimal digits or alphanumeric equivalents of groups of binary bits, in order to *simplify the task of entering the key from a keyboard.*

Ex. 1007, col. 5, ll. 59-64; col. 9, ll. 43-48 (emphasis added). Achates asserts that the entitlement key in Beetcher is 128 bits, which, when converted to American Standard Code for Information Interchange (ASCII) format, would be 16 characters for the user to hear and type, but if Ginter's digital signature were added, it would "at least double or triple" the size of the entitlement key and be too much to read over the telephone. PO Resp. 44-45; *see* Ex. 2014 ¶¶ 76-78 (Dr. Wang testifying that the entitlement key would "at least double or triple in size").

Achates's argument is not persuasive. Again, Achates makes no assertion that it would be technically infeasible or difficult to include a digital signature—just that it would be inconvenient for the user to have to enter more characters. Even assuming that Achates is correct that the entitlement key would "double or triple" in size if it had a digital signature (e.g., 32 or 48 characters instead of 16, based on Dr. Wang's statement), we do not consider this to be such a large difference that a skilled artisan would be dissuaded from using a digital signature, particularly given the advantages of using digital signatures cited by Mr. Schneier. During his deposition, Apple questioned Dr. Wang about the Windows XP installer software, which Dr. Wang acknowledged required the user to enter 42

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characters. *See* Ex. 2035 at 387:8-388:10; Ex. 1055 at 6 (“The confirmation ID is a 42-digit integer containing the activation key and check digits that aid in error handling.”). Windows XP was introduced in 2001, after the 1997 filing date of the ’889 patent, as Apple acknowledged after filing its Reply.⁷ *See* Mot. to Exclude 9-10 (citing Exs. 2041, 2042); Exclude Opp. 13-14. Nevertheless, given that the issue is one of practicality and not patentability, and given Windows XP’s proximity in time to 1997 and undeniable commercial success, Windows XP is of at least some relevance in determining whether it would have been too burdensome on a user of the Beetcher system to enter more than 16 characters.

Achates’s argument suffers from another flaw, however. Although Achates is correct that Beetcher expresses a desire to simplify the user’s task of entering the entitlement key on a keyboard, Beetcher expressly contemplates other mechanisms of receiving and entering the entitlement key, including sending the entitlement key by “mail” (in which case the user simply could read the characters from the mailing and type them in to the keyboard) or transmitting it “electronically” (in which case the user may not even need to enter the entitlement key at all). *See* Ex. 1007, col. 5, ll. 59-64. Thus, we are not persuaded by Achates’s argument that a person of ordinary skill in the art would have been dissuaded from using a digital signature in the entitlement key of Beetcher.

Fourth, Achates asserts that the object of the invention in Beetcher is to protect the software from unauthorized use, while at the same time allowing authorized users to freely copy and back up the software. PO Resp.

⁷ Achates’s Motion to Exclude the Windows XP evidence submitted by Apple is addressed below. *See infra* Section II.I.3.

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39-41 (citing Ex. 1007, col. 3, ll. 58-61); *see* Ex. 2014 ¶¶ 79-80. According to Achates, this objective would be “completely defeated by combining Bohannon’s prerequisite-to-installation technique” with Beetcher and Ginter. PO Resp. 40. We are persuaded, however, by Mr. Schneier’s testimony that incorporating installation functionality, such as the “loader module” described in Bohannon, into the system of Beetcher, such that a user would input the entitlement key before copying the software onto the user’s computer, would have been obvious. Mr. Schneier testifies that “the processes described in Beetcher will include operations such as placing the software in a permanent position from which it will be executed,” and “[a] person of ordinary skill in the art, after obtaining and processing the entitlement key, would have had every reason to install the software, as the ultimate use of the software is the point of obtaining and processing the entitlement key in the first place.” Ex. 1041 ¶¶ 56, 365-66. Thus, according to Mr. Schneier, incorporating the installation functionality of Bohannon into the system of Beetcher would be “the use of an old element to perform the same function it had been known to perform in the prior art without any new or unexpected result.” *See id.* ¶ 367 (citing Ex. 1008, col. 3, ll. 24-37). The statements in Beetcher identified by Achates do not refute Mr. Schneier’s reasons for combining the references. They only show that it was one goal of Beetcher to allow free distribution of the software (because the authorization check can be performed at run time). It is not necessary, however, that all of the objectives of a prior art reference be achieved for it to be properly combinable with another reference.

We are persuaded, by a preponderance of the evidence, that claim 1, as well as dependent claims 2-12, which Achates does not argue separately

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in its Patent Owner Response, would have been obvious over Beetcher, Ginter, and Bohannon.

4. Conclusion

Based on the record evidence, in light of the arguments presented, Apple has shown, by a preponderance of the evidence, that claims 17-19 are anticipated by Beetcher, and claims 1-12 are unpatentable over Beetcher, Ginter, and Bohannon.

G. Grounds Based on Ginter

With respect to the alleged grounds of unpatentability based on Ginter, we have reviewed Apple's Petition, Achates's Patent Owner Response, and Apple's Reply, as well as the evidence discussed in each of those papers. We are persuaded, by a preponderance of the evidence, that claims 17-19 are anticipated by Ginter under 35 U.S.C. § 102(e). We are not persuaded, by a preponderance of the evidence, that claims 1-7 and 9-12 are anticipated by Ginter under 35 U.S.C. § 102(e), or that claim 8 is unpatentable over Ginter and Beetcher under 35 U.S.C. § 103(a).

1. Ginter

Ginter discloses computer systems providing a “distributed virtual distribution environment (VDE)” that “help[s] to ensure that information is accessed and used only in authorized ways.” Ex. 1005, Abstract. Electronic content is stored in “objects” (also called “containers”) for distribution to users, and access to the content is regulated via a permissions record (PERC) associated with the content and provided to the user (separately or with the

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object). *Id.* at col. 13, l. 46-col. 14, l. 20; col. 58, l. 61-col. 59, l. 11; Fig. 5A; col. 147, ll. 33-59 (“no end user may use or access a VDE object unless a permissions record 808 has been delivered to the end user”). PERC 808 “specifies the rights associated with the object 300 such as, for example, who can open the container 302, who can use the object’s contents, who can distribute the object, and what other control mechanisms must be active.” *Id.* at col. 58, l. 67-col. 59, l. 5. “For example, permissions record 808 may specify a user’s rights to use, distribute and/or administer the container 302 and its content.” *Id.* at col. 59, ll. 5-7. For certain types of objects, the PERC is encrypted along with the object using a symmetric key and later decrypted on the user’s machine. *Id.* at col. 199, ll. 1-6; col. 129, ll. 50-54; col. 133, ll. 50-53; col. 208, l. 65-col. 209, l. 20. Ginter discloses that the PERC can contain an “Object ID” that identifies the VDE object, as well as multiple “key blocks” that store decryption keys utilized to access content in “data blocks” within the object. *Id.* at col. 127, l. 45-col. 128, l. 2; col. 151, ll. 9-35; Fig. 26A. Ginter also discloses the use of a “validation tag” for “confirming the identity and correctness of received, VDE protected, information,” and a “digital signature” to be verified against an expected digital signature. *Id.* at col. 12, ll. 27-33; col. 151, ll. 9-35; col. 215, ll. 7-63.

2. Claims 17-19 are Anticipated by Ginter

As to independent claim 17, Apple contends that Ginter discloses reading an encrypted “token” (the PERC), decrypting the encrypted token to recover a token comprising an “indicium of a first information product” (the Object ID or key block), modifying the token to comprise an “indicium of a second information product” (a modified Object ID or key block),

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encrypting the token again to create a “newly encrypted token,” and storing the new token. Pet. 9-11, 16 (citing Ex. 1041 ¶¶ 294-302).

Achates argues that the PERC in Ginter does not comprise an “indicium” of a first information product, as recited in claim 17 (and claim 1). PO Resp. 21-26, 29 (citing Ex. 2013 ¶¶ 55-64). Apple’s position is that the Object ID and key blocks in the PERC both satisfy the “indicium” limitations. Pet. 9-11, 16. As to the Object ID, Achates contends that (1) Object ID field 940 identifies the “totality” of elements in the VDE object container, not “just” information content 304, and (2) Object ID field 940 has the same datum regardless of whether the container’s content is changed or deleted, which shows that Object ID field 940 is not an “indicium” of a particular information product. PO Resp. 22-24. As to the key blocks, Achates argues that (1) the VDE accesses the datum in the key block to use as a key to decrypt the corresponding data blocks, not “as a pointer to—or indicium of—the data block,” and (2) Ginter permits two key blocks to have the same key, which shows that the key block is not an “indicium” of a particular information product. *Id.* at 24-26.

Achates’s arguments are not persuasive, as they are based on the incorrect premise that an “indicium” of an information product can *only* identify content within a file and must uniquely identify *only one* information product. *See* Pet. Reply 8-9. There is no prohibition in claim 17 on the indicium indicating other things, and the indicium need not be a “pointer.” *See* Ex. 2032 at 304:18-305:2 (Mr. Radbel stating that he does not “consider indicium to be a pointer”). The only requirement is that it be an “indicium,” or “indication,” of an information product. Mr. Radbel acknowledged that the Object ID in Ginter is used to find the correct

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content, Ex. 2031 at 45:12-17, and the key blocks are associated with and used to access the data in the correct data block, Ex. 1005 at 127:45-128:2. We are persuaded by Mr. Schneier's testimony that the key blocks and Object ID in Ginter each are an "indicium" of an information product, and that the PERC can be updated to add or modify the authorizations for information products as necessary. *See* Pet. 9-11, 16; Ex. 1041 ¶¶ 167-73, 182, 299; Ex. 1005, col. 161, ll. 52-57 ("This updating might, for example, comprise replacing an expired PERC 808 with a fresh one, modifying a PERC to provide additional (or lesser) rights, etc.").

Achates further argues that Object ID field 940 in Ginter is a single field that identifies the VDE object and, therefore, cannot be an indicium of a first information product and an indicium of a second information product. PO Resp. 29-32. Achates bases this conclusion on its reading of the claim, arguing that "[t]he fact that the encrypted token as it exists before it is modified comprises an indicium of [a] first information product and as it exists after it is modified comprises an indicium of a second information product mandates that the claim be construed to require *two distinct indicia*." *Id.* at 29 (emphasis added). We do not agree. Claim 17 requires decrypting the encrypted token to recover a token comprising an "indicium of a first information product" and modifying the *token* to comprise an "indicium of a second information product." The claim does not require that the particular content of the "indici[a]" be different from each other, or that the indicium of the first information product be retained after the token is modified. Further, even if Achates was correct as to the Object ID field, the argument does not account for the key blocks (the other asserted "indici[a]" of claim 17 according to Apple). We are persuaded by Mr. Schneier's testimony

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regarding the updating of the key blocks and Object ID in Ginter. *See* Pet. 16; Ex. 1041 ¶¶ 167-74, 297-300; Ex. 1005, col. 161, ll. 52-57.

Finally, Achates is incorrect in its assertion that Apple's analysis is based on "disjoint parts of Ginter without regard to their relationship." PO Resp. 13-14. Achates does not develop this argument with respect to the particular limitations of claims 17-19 or explain sufficiently why the particular portions of Ginter cited for the limitations of these claims relate to different embodiments, rather than the same preferred embodiment.

We are persuaded, by a preponderance of the evidence, that Ginter discloses all of the limitations of claim 17, and all of the limitations of dependent claims 18 and 19, which Achates does not argue separately in its Patent Owner Response.

3. Apple Has Not Shown Claims 1-7 and 9-12 to be Anticipated by Ginter

With respect to claim 1, Apple contends that Ginter discloses receiving and decrypting an encrypted "launch code" (the PERC) with a "string, R" (a decryption key) to recover a "first candidate authentication code" (digital signature or validation tag) and an "indicium of a first information product" (Object ID or key block), as recited in claim 1. Pet. 9-11. Apple further argues that Ginter discloses the "installing" step of claim 1 because "Ginter shows actions that occur if a PERC is found valid by matching of authentication codes in the PERC. These actions may include, *inter alia*, registration of the VDE object associated with the PERC or the storage of the VDE object in the object repository." *Id.* at 11 (citations omitted). With respect to the "when" clause of the "installing" step, Apple relies on the following testimony from Mr. Schneier:

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Ginter explains that the installation of the VDE object associated with the PERC is only accomplished after the validation information associated with the PERC, for example, validation tags, are “correlate[d] . . . to ensure that they are authentic and match.” *See* ¶¶ 159-161, *supra*; Ex. 1005 at 112:44-47. Ginter also explains that, for example, . . . “digital signatures” must be “compared favorably,” Ex. 1005 at 223:01-8. *See* ¶¶ 162-166, *supra*.

Ex. 1041 ¶ 196. As explained above, we interpret “installing” to mean “placing in a position so as to be ready for use.” *See supra* Section II.A.

Achates argues that Ginter does not disclose “installing said first information product onto said computer *when said candidate authorization code matches a first known authorization code*,” as recited in claim 1 (emphasis added), relying on the testimony of Mr. Radbel in support. PO Resp. 19-21 (citing Ex. 2013 ¶¶ 36-38, 51-53). Achates correctly points out that validation tag 948, shown in Figure 26A, is the only “validation tag” that Ginter teaches is inside the PERC. *Id.* at 19. According to Achates, “Ginter does not teach when validation tag 948 is verified or how it is verified, but most importantly, Ginter does not teach what the consequences are of the successful verification of validation tag 948 or a failure of verification.” *Id.*

Having reviewed Apple’s contentions regarding the “installing” step, we agree with Achates and are not persuaded, by a preponderance of the evidence, that Ginter discloses installing a first information product *when* there is a validation tag or digital signature match. As Achates points out, the portion of Ginter cited by Mr. Schneier regarding correlation of a validation tag pertains to the run time task of opening a “channel” that “provides event processing for a particular VDE object 300, a particular user, and a particular ‘right’ (i.e., type of event).” *See* Ex. 1005, col. 112,

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ll. 23-47, Fig. 15B; PO Resp. 20; Ex. 1041 ¶ 196. The “open channel” disclosure is not tied directly to validation tag 948, does not disclose expressly verifying validation tag 948 in the PERC, and does not disclose expressly registering or storing a VDE object when there is a match. We find Mr. Radbel’s testimony persuasive on this point. *See* Ex. 2013 ¶¶ 51-53. Similarly, the portion of Ginter cited by Mr. Schneier regarding digital signatures pertains to a “firmware download process” to “load externally provided firmware and/or data elements into the PPE [Protected Processing Environment].” *See* Ex. 1005, col. 222, l. 40-col. 223, l. 8; PO Resp. 21; Ex. 1041 ¶ 196. Again, the cited portion does not disclose expressly verifying a digital signature in the PERC and registering or storing a VDE object when there is a match. The two cited portions appear to disclose verification of validation tags and digital signatures in general, and Apple does not explain sufficiently why they allegedly satisfy the required condition for “installing” in claim 1—namely, installing *when* there is a validation tag or digital signature match.

In its Reply, Apple cites general disclosures from Ginter regarding matching validation tags and the use of “[c]ontrol structures” to prevent tampering, and argues that Mr. Radbel “could identify nothing in Ginter suggesting that ‘validation tag 948’ was used differently than the other Ginter validation tags.” Pet. Reply 8. It is not Achates’s burden to show that validation tag 948 is *not* used like other validation tags in Ginter, however. Rather, it is Apple’s burden to show that Ginter discloses, expressly or inherently, installing *when* there is a validation tag or digital signature match. That burden is not satisfied by citing unrelated portions of Ginter pertaining to the use of validation tags and digital signatures in

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general, or by assuming that validation tag 948 operates like other validation tags. Apple has not pointed to sufficiently specific disclosure in Ginter to demonstrate that the full “installing” step of claim 1 is performed.

Apple has not shown that Ginter discloses, expressly or inherently, “installing said first information product onto said computer when said candidate authorization code matches a first known authorization code,” as recited in claim 1.⁸ We are not persuaded, by a preponderance of the evidence, that claim 1, as well as dependent claims 2-7 and 9-12, are anticipated by Ginter.

4. Apple Has Not Shown Claim 8 to be Unpatentable Over Ginter and Beetcher

Apple asserts that claim 8 would have been obvious over Ginter and Beetcher. Pet. 16-17. For the reasons explained above, we agree with Achates that Ginter fails to teach the “installing” step of claim 1. Apple does not rely on Beetcher for this limitation in its analysis of the asserted combination of Ginter and Beetcher. *See id.* Accordingly, we are not persuaded that claim 8 would have been obvious over Ginter and Beetcher.

5. Conclusion

Based on the record evidence, in light of the arguments presented, Apple has shown, by a preponderance of the evidence, that claims 17-19 are anticipated by Ginter, but has not shown claims 1-7 and 9-12 to be

⁸ Because we agree with Achates regarding the “installing” step, we need not reach Achates’s other arguments regarding claim 1. *See* PO Resp. 15-18, 21-28.

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anticipated by Ginter or shown claim 8 to be unpatentable over Ginter and Beetcher.

*H. Apple's Motion for Observation on Email Communications and
Achates's Motion to Seal*

Apple's Motion for Observation on email communications between Mr. Radbel and Dr. Wang pertains to certain statements the witnesses made regarding the term "authentication code" used in the claims. *See* Obs. 1-3 (citing Exs. 1067, 1068). We note that Achates does not argue in its Patent Owner Response in this proceeding that the digital authorization certificate in Pettitt is not a "first candidate authentication code." To the extent the communications relate to other alleged "first candidate authentication codes" in the prior art (e.g., the validation tag in Ginter), we have considered Apple's observations and Achates's response. *See* Obs. 1-3; Obs. Resp. 1-4.

Achates also moves to seal the email communications (Exhibits 1067 and 1068), as well as Apple's Motion for Observation (Paper 74)⁹ and Achates's response (Paper 79). Mot. to Seal 2-4. In previous Orders, we ordered Achates to produce the emails, authorized Apple to file them as exhibits in this proceeding, and authorized Achates to file a motion to seal. *See* Papers 44, 49, 66, 73.

There is a strong public policy in favor of making information filed in an *inter partes* review open to the public, especially because the proceeding determines the patentability of claims in an issued patent and, therefore, affects the rights of the public. Under 35 U.S.C. § 316(a)(1) and 37 C.F.R.

⁹ Apple's exhibit list (Paper 75), filed with its Motion for Observation, also was filed under seal.

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§ 42.14, the default rule is that all papers filed in an *inter partes* review are open and available for access by the public; a party, however, may file a motion to seal and the information at issue is sealed pending the outcome of the motion. It is, however, only “confidential information” that is protected from disclosure. 35 U.S.C. § 316(a)(7). In that regard, the Trial Practice Guide, 77 Fed. Reg. at 48,760, provides:

The rules aim to strike a balance between the public’s interest in maintaining a complete and understandable file history and the parties’ interest in protecting truly sensitive information.

. . .

Confidential Information: The rules identify confidential information in a manner consistent with Federal Rule of Civil Procedure 26(c)(1)(G), which provides for protective orders for trade secret or other confidential research, development, or commercial information. § 42.54.

The standard for granting a motion to seal is “for good cause.” 37 C.F.R. § 42.54(a). Achates, as movant, bears the burden of proof in showing entitlement to the requested relief. 37 C.F.R. § 42.20(c). Achates must explain why the information sought to be sealed constitutes “confidential information.”

Achates has not met its burden to show that the emails, and the papers citing the emails, contain “confidential information.” The emails contain discussions between Achates’s two declarants, Mr. Radbel and Dr. Wang, regarding their opinions on the prior art at issue in this proceeding. *See* Exs. 1067, 1068. They do not appear to contain any trade secrets, research information, or information that would be commercially sensitive.

Achates makes three arguments in its Motion to Seal. First, Achates argues that the parties agreed not to permit discovery regarding the

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“process” of producing declarations and, therefore, had a “shared expectation that such information would be maintained confidentially and certainly not be made available to the public.” Mot. to Seal 2-3. We addressed this issue in ruling on Apple’s motion for additional discovery, and were not persuaded by Achates’s argument regarding an alleged agreement between the parties. *See* Paper 66 at 8. For the same reasons, we are not persuaded that the emails should be sealed as “confidential information” based on the alleged agreement.

Second, Achates argues that the emails contain “confidential communications with and at the direction of counsel,” and are “immune from discovery at least under the doctrine of work-product immunity.” Mot. to Seal 3 & n.1. Similar to the argument it made in connection with Apple’s motion for additional discovery, Achates does not cite any case law or explain in any detail *why* it believes the emails are privileged. *See* Paper 66 at 8. Moreover, Achates did not seek rehearing of our decision granting the motion for additional discovery, and produced the emails to Apple. We also note that, contrary to Achates’s assertion that the emails are confidential communications “with” counsel, the emails at issue are “directly” between Mr. Radbel and Dr. Wang, in accordance with the limited additional discovery we authorized. *See id.* at 9; Exs. 1067, 1068.

Third, Achates contends that because Apple’s observations are “rank speculation and offer no insights into the credibility” of Mr. Radbel and Dr. Wang, the Board should not review them in its analysis and “there is no need to make [the emails] available to the public.” Mot. to Seal 3-4. Whether an opposing party’s position regarding a document ultimately has merit, however, is not the test for determining whether the document should

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be sealed. The test is whether the material contains “confidential information,” and Achates has not shown that the emails do.

As Achates provides no basis for deeming the emails to contain “confidential information,” its Motion to Seal is denied. Papers 74, 75, and 79, and Exhibits 1067 and 1068, will be unsealed, and access to the materials in the Patent Review Processing System (PRPS) will be changed from “Parties and Board Only” to “Public.”

I. Achates’s Motion to Exclude

In its Motion to Exclude, Achates seeks to exclude (1) the declaration of Mr. Schneier (Exhibit 1041) submitted by Apple with the Petition, (2) part of the cross-examination deposition testimony of Achates’s declarant, Dr. Wang (Exhibits 2034 and 2035), and (3) Exhibits 1055 and 1056 submitted by Apple. For the reasons discussed below, the motion is denied.

1. Schneier Declaration (Exhibit 1041)

With few exceptions, the Federal Rules of Evidence apply to *inter partes* review proceedings. 37 C.F.R. § 42.62(a). The rules governing *inter partes* review set forth the proper procedure for objecting to, and moving to exclude, evidence when appropriate. When a party objects to evidence that was submitted during a preliminary proceeding, such an objection must be served within ten business days of the institution of trial. 37 C.F.R. § 42.64(b)(1). The objection to the evidence must identify the grounds for the objection with sufficient particularity to allow correction in the form of supplemental evidence. *Id.* This process allows the party relying on the evidence to which an objection is served timely the opportunity to correct,

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by serving supplemental evidence within ten business days of the service of the objection. *See* 37 C.F.R. §§ 42.64(b)(1), 42.64(b)(2). If, upon receiving the supplemental evidence, the opposing party is still of the opinion that the evidence is inadmissible, the opposing party may file a motion to exclude such evidence. 37 C.F.R. § 42.64(c).

Achates alleges various reasons why Mr. Schneier's declaration (Exhibit 1041) should be excluded. Mot. to Exclude 1-8. The declaration, however, was submitted by Apple with its Petition for *inter partes* review (Paper 2). Because the evidence was submitted during a preliminary proceeding, any objection to such evidence must have been served within ten business days of the institution of the trial. 37 C.F.R. § 42.64(b)(1). Achates does not allege that Apple was served with any objection within ten business days of the institution of trial (Paper 22, dated June 3, 2013) or at any other time. Instead, Achates submits that 37 C.F.R. § 42.64 does not apply "because the bases of the objections arose when [Apple] failed to update Mr. Schneier's declaration as part of its Reply." Mot. to Exclude 7. Achates does not point to any rule or authority in support of the theory that Apple had a duty to "update" a declaration that was submitted with the Petition for *inter partes* review. Moreover, Apple would have had the right to serve supplemental evidence for the purpose of correcting any evidentiary deficiencies in the declaration, had Apple been provided with proper and timely notice, as required by 37 C.F.R. § 42.64. Thus, we are not persuaded that Mr. Schneier's declaration should be excluded.

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2. Dr. Wang's Deposition Testimony (Exhibits 2034 and 2035)

Achates moves to exclude certain testimony of its own declarant, Dr. Wang, from his deposition that took place on November 19-20, 2013. Mot. to Exclude 8-9, 11-14. An objection to deposition evidence, however, must be made during the deposition. 37 C.F.R. § 42.64(a). Achates does not point to any objections to the lines of questioning or to the testimony in the transcript of the deposition. Moreover, Achates could have dealt with testimony it believed inadmissible with redirect examination of the witness, but did not do so. *See* 37 C.F.R. § 42.53(c)(2). Thus, we are not persuaded that Dr. Wang's deposition testimony should be excluded.

3. Exhibits 1055 and 1056

Achates moves to exclude two documents relating to the Windows XP operating system that were produced by Apple at the deposition of Dr. Wang. Exhibits 1055 and 1056 were introduced by Apple during Dr. Wang's deposition on November 20, 2013. Ex. 2035 at 374:20-375:11. According to Achates, it objected to the exhibits "within the time period allowed for objections to supplemental evidence." Mot. to Exclude 11 n.1. Achates refers to its Exhibits 2046 and 2047. *Id.* Exhibit 2046 appears to be a reproduction of an email communication from Achates's counsel to Apple's counsel on November 27, 2013 that refers to "enclose[d]" objections to evidence recently brought to Achates's attention by Apple. Exhibit 2047 is a paper styled "Patent Owner Objection to Evidence Pursuant to 37 C.F.R. § 42.64," dated November 27, 2013.

Apple responds that Achates waived any objections to Exhibits 1055 and 1056 because it did not object to them when they were introduced at the

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deposition, citing 37 C.F.R. §§ 42.53(f)(8) and 42.64(a). Exclude Opp. 10-11. However, 37 C.F.R. § 42.53(f)(8) does not apply because the rule refers to waiver of objection to the “content, form, or manner of taking the deposition,” as opposed to documents introduced during the deposition. Pursuant to 37 C.F.R. § 42.53(f)(4), “[a]ll objections made at the time of the deposition to the qualifications of the officer taking the deposition, the manner of taking it, *the evidence presented*, the conduct of any party, and any other objection to the deposition shall be noted on the record by the officer” (emphasis added). We need not determine, however, whether exclusion of an exhibit introduced at a deposition (37 C.F.R. § 42.53(f)(3)) requires an objection during the deposition, or may be objected to within five business days, in accordance with 37 C.F.R. § 42.64(b)(1). First, Achates does not point to any objection directed to the exhibits in the deposition transcript. Second, even assuming that objection may be made after the deposition, in accordance with Achates’s theory, Achates has not shown that the exhibits must be excluded.

Once a trial has been instituted, any objection must be served within five business days of service of evidence to which the objection is directed. 37 C.F.R. § 42.64(b)(1). The objection must “identify the grounds for the objection with sufficient particularity to allow correction in the form of supplemental evidence.” *Id.*

Achates’s Motion to Exclude sets forth two bases as to why Exhibits 1055 and 1056 should be excluded. First, Achates contends that the exhibits should be excluded as irrelevant because the documents are not prior art. Mot. to Exclude 11. As acknowledged by Achates, however, Apple does not rely on the documents as representing prior art. *See* Exclude Opp. 11;

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Exclude Reply 4. The mere fact that the documents are not prior art does not merit their exclusion. *See, e.g., In re Wilson*, 311 F.2d 266, 268-69 (CCPA 1962) (publication that was not cited as a prior art reference or as suggesting the claimed invention was cited properly to show a state of fact); *Ex parte Erlich*, 22 U.S.P.Q.2d 1463, 1465, 1992 WL 93132, at *3 (BPAI Jan. 16, 1992) (publication that was not prior art properly was relied upon as establishing the level of ordinary skill in the art at and around the time of the invention).

Achates's second basis for exclusion set forth in the Motion to Exclude is that Apple failed to authenticate the exhibits. Mot. to Exclude 11. Achates does not, however, point to where the objection (Exhibit 2047) identified that ground with sufficient particularity, which would have, thus, enabled a response by Apple to correct any such deficiency by serving supplemental evidence. As such, the allegation of failure to authenticate the exhibits is not timely and was not preserved by the objection served on Apple. *See* 37 C.F.R. §§ 42.64(b), 42.64(c).

III. ORDER

Apple has demonstrated, by a preponderance of the evidence, that:

- (1) claim 1 is anticipated by Pettitt under 35 U.S.C. § 102(e);
- (2) claims 2, 4, 5, 7, and 9 are unpatentable over Pettitt and Beetcher under 35 U.S.C. § 103(a);
- (3) claims 17-19 are anticipated by Beetcher under 35 U.S.C. § 102(e);
- (4) claims 1-12 are unpatentable over Beetcher, Ginter, and Bohannon under 35 U.S.C. § 103(a); and
- (5) claims 17-19 are anticipated by Ginter under 35 U.S.C. § 102(e).

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Apple has not demonstrated, by a preponderance of the evidence, that claims 1-7 and 9-12 are anticipated by Ginter under 35 U.S.C. § 102(e), or that claim 8 is unpatentable over Ginter and Beetcher under 35 U.S.C. § 103(a). Claims 13-16 of the '403 patent are not subject to the instant *inter partes* review.

In consideration of the foregoing, it is hereby:

ORDERED that claims 1-12 and 17-19 of the '403 patent have been shown to be unpatentable;

FURTHER ORDERED that Achates's Motion to Exclude is *denied*;

FURTHER ORDERED that Achates's Motion to Seal is *denied*;

FURTHER ORDERED that Papers 74, 75, and 79, and Exhibits 1067 and 1068, are unsealed; and

FURTHER ORDERED that the copies of Exhibits 1003 and 1041 filed on December 14, 2012, are expunged from the record of this proceeding.

This is a final decision. Parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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PETITIONER:

Jeffrey P. Kushan
Joseph A. Micallef
SIDLEY AUSTIN LLP
jkushan@sidley.com
jmicallef@sidley.com

PATENT OWNER:

Brad D. Pedersen
Eric H. Chadwick
PATTERSON THUENTE PEDERSEN, P.A.
prps@ptslaw.com
chadwick@ptslaw.com

Jason Paul DeMont
KAPLAN BREYER SCHWARTZ & OTTESEN
jpdemont@kbsolaw.com

Vincent McGeary
GIBBONS, P.C.
vmcgeary@gibbonslaw.com



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(12) **United States Patent**
DeMont

(10) **Patent No.:** **US 6,173,403 B1**
(45) **Date of Patent:** ***Jan. 9, 2001**

(54) **METHOD AND APPARATUS FOR
DISTRIBUTING INFORMATION PRODUCTS**

(75) Inventor: **Jason Paul DeMont**, Basking Ridge,
NJ (US)

(73) Assignee: **Achates Reference Publishing, Inc.**,
Basking Ridge, NJ (US)

(*) Notice: Under 35 U.S.C. 154(b), the term of this
patent shall be extended for 0 days.

This patent is subject to a terminal dis-
claimer.

(21) Appl. No.: **09/288,012**
(22) Filed: **Apr. 8, 1999**

Related U.S. Application Data

(63) Continuation-in-part of application No. 08/845,805, filed on
Apr. 30, 1997.

(51) **Int. Cl.**⁷ **H04K 1/00**

(52) **U.S. Cl.** **713/185; 380/283; 713/193;**
705/51; 705/52; 705/55; 705/59; 705/66;
705/67

(58) **Field of Search** 380/283; 705/51,
705/52, 55, 59, 66, 67; 713/185, 193

(56) **References Cited**
U.S. PATENT DOCUMENTS

4,683,968 8/1987 Appelbaum et al. .
4,757,534 * 7/1988 Matyas et al. 380/25
4,845,715 7/1989 Francisco .
4,847,902 * 7/1989 Hampson 380/4

4,864,494 * 9/1989 Kobus, Jr. 364/200
5,010,571 * 4/1991 Katznelson 380/4
5,103,476 4/1992 Waite et al. .
5,138,712 * 8/1992 Corbin 395/700
5,204,897 * 4/1993 Wyman 380/4
5,222,134 6/1993 Waite et al. .
5,260,999 * 11/1993 Wyman 384/4
5,287,408 * 2/1994 Samson 380/4
5,319,705 * 6/1994 Halter et al. 380/4
5,337,357 8/1994 Chou et al. .
5,343,526 8/1994 Lassers .
5,392,351 * 2/1995 Hasebe et al. 380/4
5,490,216 2/1996 Richardson .
5,553,139 9/1996 Ross et al. .
5,579,222 11/1996 Bains et al. .
5,625,690 4/1997 Michel et al. .
5,636,277 6/1997 Nagahama .
5,666,411 9/1997 McCarty .
5,745,879 * 4/1998 Wyman 705/1
5,751,805 5/1998 Otsuki et al. .
5,758,069 5/1998 Olsen .
5,818,933 * 10/1998 Kambe et al. 380/4

* cited by examiner

Primary Examiner—Tod R. Swann
Assistant Examiner—Paul E. Callahan

(57) **ABSTRACT**

A method and apparatus for distributing information prod-
ucts is described that comprises: receiving an encrypted
launch code; decrypting the encrypted launch code with a
string, R, as the key to recover a first candidate authentica-
tion code and an indicium of a first information product; and
installing the first information product onto the computer
when the candidate authorization code matches a first known
authorization code.

19 Claims, 4 Drawing Sheets

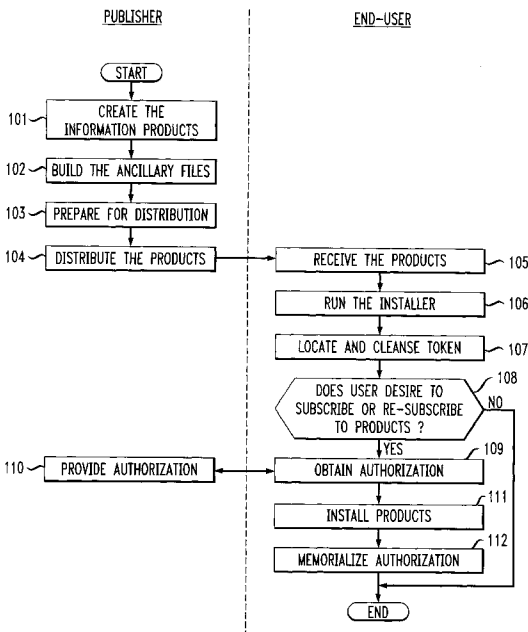


FIG. 1

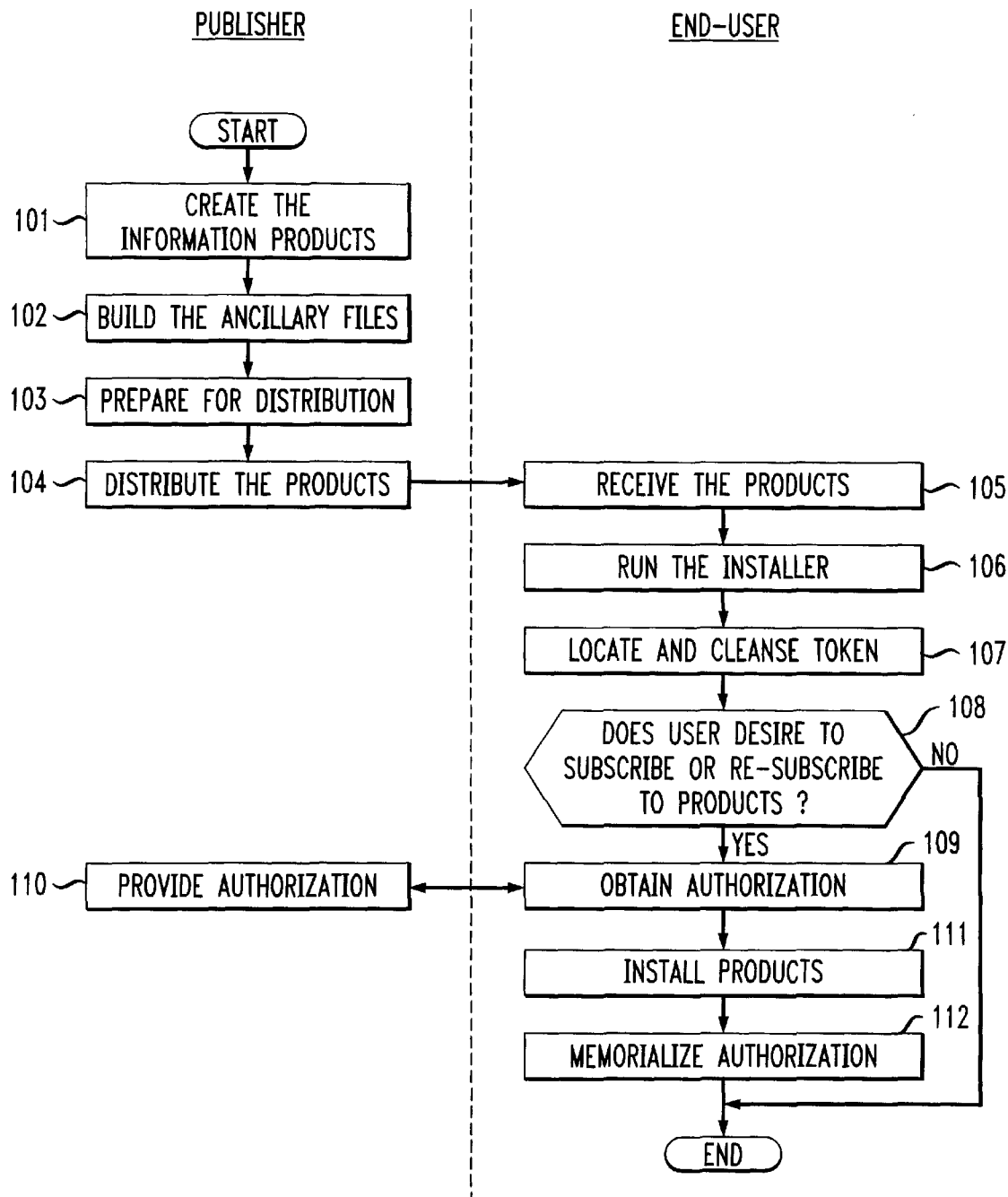


FIG. 2

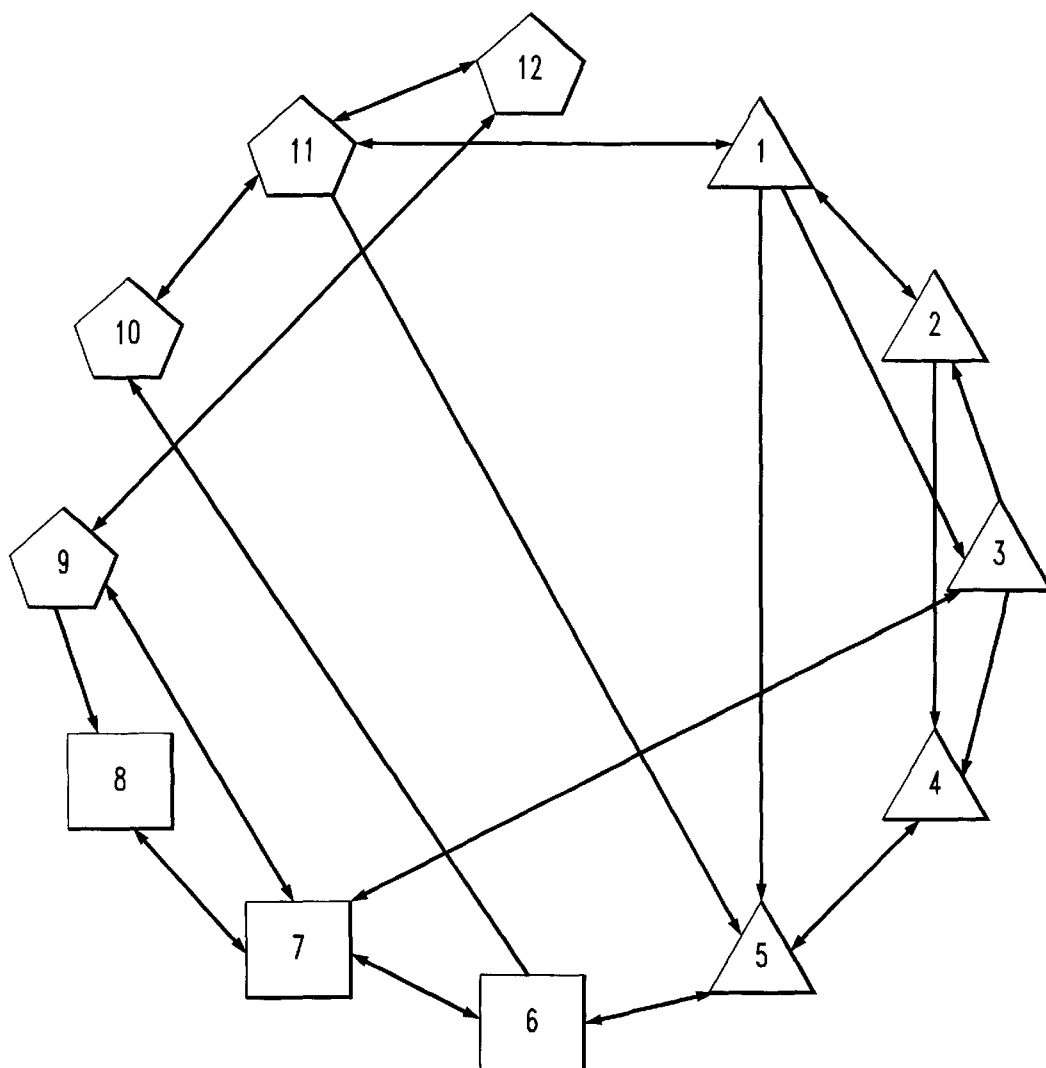


FIG. 3

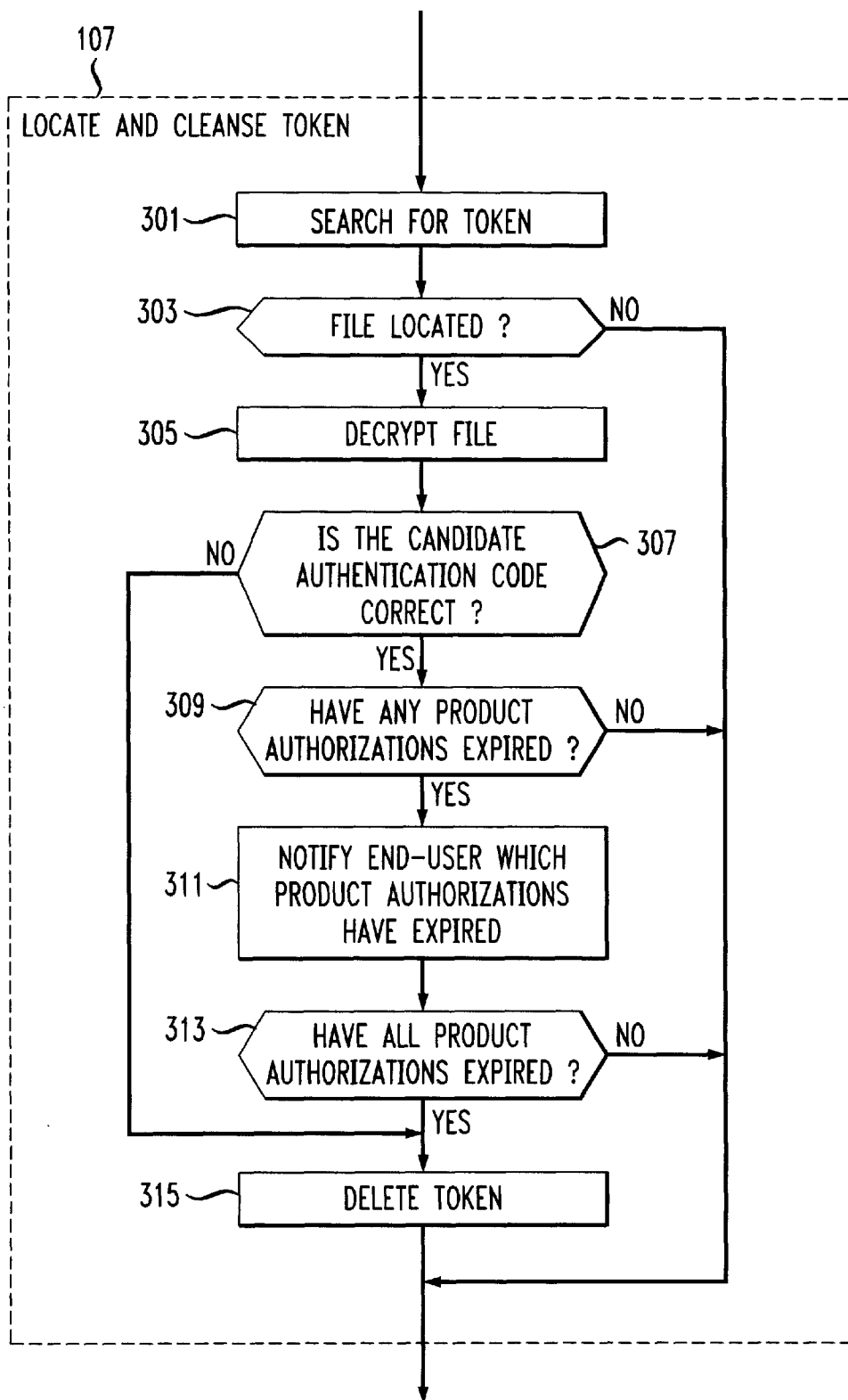
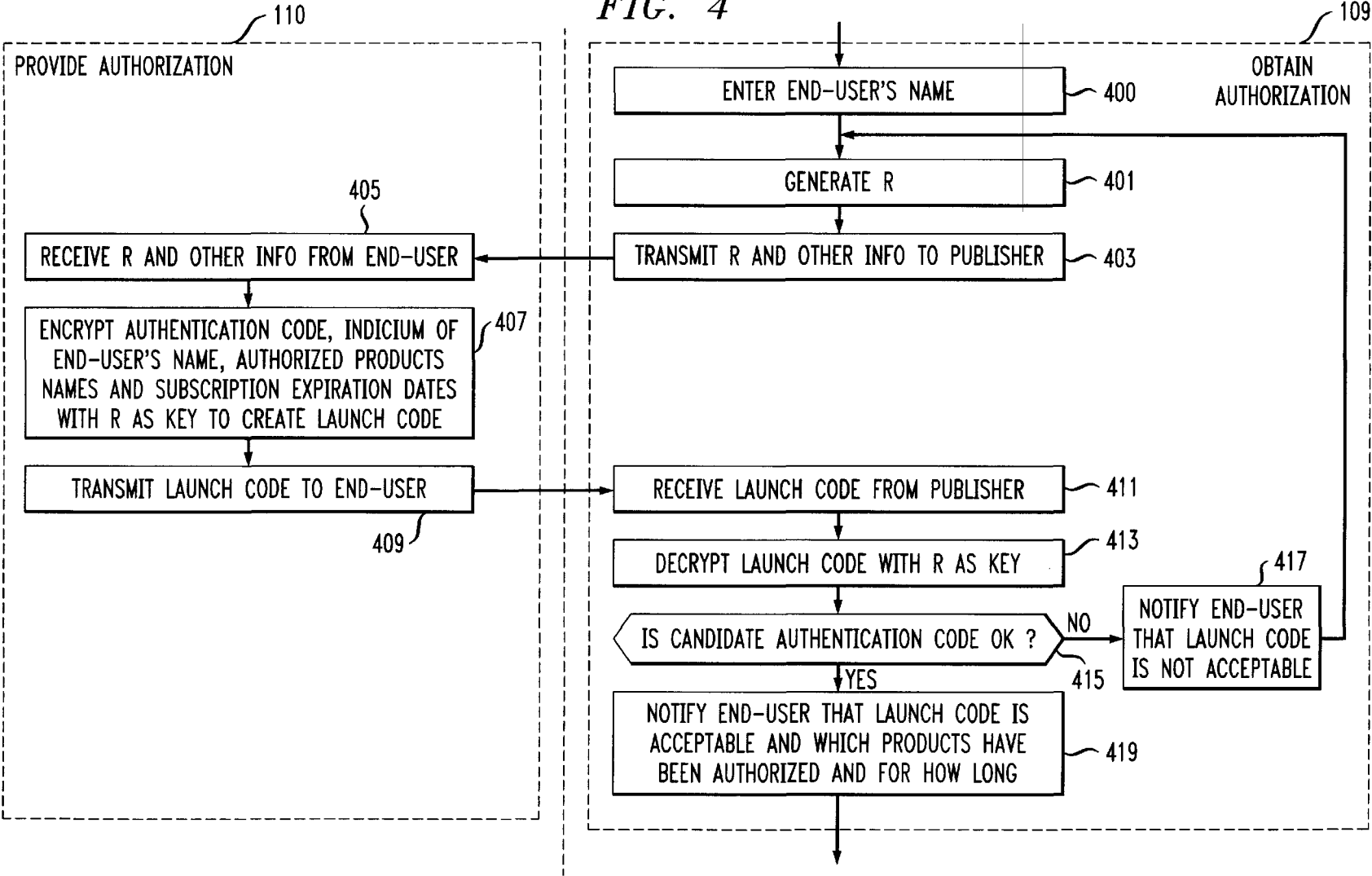


FIG. 4



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METHOD AND APPARATUS FOR DISTRIBUTING INFORMATION PRODUCTS

CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation-in-part of U.S. patent application Ser. No. 08/845,805, filed Apr. 30, 1997, which application is incorporated by reference.

FIELD OF THE INVENTION

The present invention relates to a method and apparatus for distributing information products in general, and, more particularly, to a method and apparatus for distributing and installing computer programs and data.

BACKGROUND OF THE INVENTION

For as long as publishers have been distributing information products, piracy has been a concern. For the purposes of this specification the term "information product" includes, but is not limited to, computer software, data, images, music, applets, photographs, animations, video, audio, text, hyper-text and multimedia works.

As a practical matter, large-scale piracy committed by professional thieves is easy for publishers to detect and police because of the inherently commercial and public aspects of large-scale piracy. Small-scale piracy committed by individuals who, for example, purchase one copy of a computer program and install it on three or four computers in a small office is more insidious and, in the aggregate, economically more harmful to publishers.

Several techniques have been used by publishers of information products to impede piracy. When music was first distributed on CDs, CD duplicating equipment were expensive and rare and publishers implicitly relied on "physical security" to impede small-scale copyright infringers. The theory underlying physical security is that the difficulty in duplicating the media containing the information product is sufficient to stop most small-scale infringement.

When it is difficult for the end-user to duplicate the media, or to transfer the information product from one computer to another over a network, the publisher can be reasonably assured that widespread piracy is not occurring. Of course, the end-user could lend, lease or sell the media embodying the information product to another who would install it, and physical security could not prevent it.

When the technology for duplicating the media embodying an information product becomes ubiquitous, or it becomes easy to copy the information product from one computer to another over a network, publishers often employ "cryptographic security" to thwart copyright infringers.

According to one technique, the installer accompanying the software will not install the software on the end-user's computer until an acceptable password is entered by the end-user at the time of installation. The password is received by the end-user from the publisher after the end-user registers with the publisher and the publisher is assured that the end-user has paid for the software. Although this technique is widely used, it suffers from the weakness that the end-user can use the media and password again to install the software on another computer. Furthermore, the end-user can post the password publicly on an electronic bulletin-board and the advantage of the secret password are lost.

SUMMARY OF THE INVENTION

Some embodiments of the present invention are capable of distributing information products without many of the

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costs and restrictions associated with techniques in the prior art. In particular, some embodiments of the present invention are capable of distributing one or more information products together (e.g., on a physical medium, electronically over a network, etc.) while reserving to the publisher the ability to control which products are actually installed on an end-user's computer.

An illustrative embodiment of the present invention comprises: receiving an encrypted launch code; decrypting the encrypted launch code with a string, R, as the key to recover a first candidate authentication code and an indicium of a first information product; and installing the first information product onto the computer when the candidate authorization code matches a first known authorization code.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 depicts a flowchart of the steps associated with distributing information products in accordance with the illustrative embodiment of the present invention.

FIG. 2 depicts a directed graph that indicates which files in a group of files contain hypertext links to which other files.

FIG. 3 depicts a flowchart of the detailed steps associated with the step of locating and cleansing the token in FIG. 1.

FIG. 4 depicts a flowchart of the detailed steps associated with the steps of providing authorization and obtaining information in FIG. 1.

DETAILED DESCRIPTION

The illustrative embodiment of the present invention facilitates the distribution of a plurality of information products by a publisher in such a manner that each product can be licensed, installed and used independently or in combination with other information products. Advantageously, this is accomplished, in part, through the use of a program commonly known as an "installer." As is well known to those skilled in the art, an installer is a program that is prepared by the publisher of an information product, that is distributed along with the information product, and that controls the installation of the information product onto the end-user's computer. Although the installer runs on the end-user's computer, it acts as a remote agent of the publisher to control how and under what circumstances the information products are installed on the end-user's computer.

Each information product associated with the illustrative embodiment constitutes a plurality of hypertext files or "web pages" that are accessed by the end-user through a browser such as Netscape Navigator or Internet Explorer. Although each information product comprises hypertext files, the files are not intended to be accessed by the end-user via the Internet. Instead, all of the information products are advantageously distributed together on a single medium (e.g., a CD-ROM, etc.) or electronically (e.g., via the Internet, etc.) and are installed on the end-user's computer, or on an intranet server associated with the end-user. It will be clear to those skilled in the art how to use a browser such as Netscape Navigator or Internet Explorer to browse through web pages that are stored locally in contrast to using the browser to browse web pages that are stored on http servers across the Internet.

One example of an information product that can be used with embodiments of the present invention comprises a plurality of web pages that constitute some of the legislative, administrative and judicial materials associated with patent

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law. Another example of an information product that can be used with embodiments of the present invention comprises a plurality of web pages that constitute some of the legislative, administrative and judicial materials associated with trademark law. And yet another example of an information product that can be used with embodiments of the present invention comprises a plurality of web pages that constitute some of the legislative, administrative and judicial materials associated with copyright law.

Information products that work with embodiments of the present invention need not relate to law, or reference materials, or even text. Other information products could comprise music, video, multimedia, or data or other executables. It will be clear to those skilled in the art how to make and use embodiments of the present invention that are associated with information products that comprise other than hypertext files.

Each information product associated with the illustrative embodiment constitutes a single issue of a periodical to which an end-user can subscribe and receive monthly updates. It will be clear to those skilled in the art that other embodiments of the present invention can be used to distribute a single information product. It will also be clear to those skilled in the art that other embodiments of the present invention can be used to distribute one or more information products that are not part of a serialization or that are part of a serialization that issues sporadically, in contrast to periodically.

FIG. 1 depicts a flowchart that outlines the steps associated with distributing information products in accordance with the illustrative embodiment of the present invention I. Create The Information Products

In accordance with step 101, each information product is created by the publisher. To assist in describing the illustrative embodiment, three information products are created whose subject matter is related. For the purposes of this specification, the three products are named "Patent Law Library," "Trademark Law Library" and "Copyright Law Library." It will be clear to those skilled in the art how to make and use embodiments of the present invention when a different number of products are created, or when their subject matter is not related, or both.

For the purposes of the illustrative embodiment, the Patent Law Library is a set of files that contain Title 35 of the United States Code as marked-up in the Hypertext Markup Language ("HTML"); the Trademark Law Library is a set of files that contain the Lanham Act as marked-up in HTML, and the Copyright Law Library is a set of files that contain Title 17 of the United States Code as marked-up in HTML. The files in each information product are advantageously viewed on an end-user's computer through a browser such as Netscape Navigator or Internet Explorer.

Although all three products are advantageously distributed together, any one, two or all three of the products can be installed into an end-user's computer. In other words, in accordance with the illustrative embodiment, one end-user can install just the Patent Law Library although another user installs both the Patent Law Library and Copyright Law Library.

Because of the perishable nature of the subject matter of each of the illustrative products, the Patent Law Library, Trademark Law Library and Copyright Law Library are each a single issue of a periodical, which issues monthly.

Each product advantageously comprises one or more files within one or more directories in a hierarchical file structure. When a product contains a large number of files, it is usually advantageous to arrange the files in multiple directories. It will be clear to those skilled in the art how to determine when a specific information product should contain multiple directories. For pedagogical reasons, the files within each of

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the three illustrative information products are contained within one of three sub-directories, which have a common root directory.

Some or all of the files in the illustrative information products advantageously contain hypertext links to items in other files. For example, the reference in 35 U.S.C. 42(c) to section 31 of the Lanham Act can be implemented as a hypertext link from the file containing 35 U.S.C. 42(c) in the Patent Law Library to the file containing section 31 in the Trademark Law Library.

It will be clear to those skilled in the art that files associated with other embodiments of the present invention can contain, for example, executable programs, data and/or references to other files, which target files may be in the same or other products. It will also be clear to those skilled in the art that information products associated with other embodiments of the present invention need not contain references to other files. It will be clear to those skilled in the art how to create the files in each information product.

All of the files in all of the information products are advantageously created and arranged in a file structure with the knowledge of the name and location in the file structure of each file it is capable of referencing, regardless of whether the files are part of the same information product or not.

The Patent Law Library comprises five files in the hierarchical file structure shown in Table 1. The Trademark Law Library comprises three files in the hierarchical file structure shown in Table 2, and the Copyright Law Library comprises four files in the hierarchical file structure shown in Table 3. Advantageously, all three products are designed to install into the same hierarchical directory space, relative to whatever the end-user defines, during installation, as the root directory for the product(s).

TABLE 1

The files that compose the Patent Law Library.	
File	Location
File 1	\directory1\file1.htm
File 2	\directory1\file2.htm
File 3	\directory1\file3.htm
File 4	\directory1\file4.htm
File 5	\directory1\file5.htm

TABLE 2

The files that compose the Trademark Law Library.	
File	Location
File 6	\directory2\file6.htm
File 7	\directory2\file7.htm
File 8	\directory2\file8.htm

TABLE 3

The files that compose the copyright Law Library.	
File	Location
File 9	\directory3\file9.htm
File 10	\directory3\file10.htm
File 11	\directory3\file11.htm
File 12	\directory3\file12.htm

For pedagogical reasons, the three information products in the illustrative embodiment comprise a total of 12 files. In commercial applications, it will be clear to those skilled in

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the art that a single information product can comprise hundreds or thousands of files. It will be clear to those skilled in the art how to make and use the files that compose the three information products.

The books *HTML Publishing for Netscape*, Stuart Harris & Gayle Kidder, Ventana Communications Group, Inc., Research Triangle Park, North Carolina, and *HTML: The Definitive Guide*, Chuck Musciano & Bill Kennedy, O'Reilly & Associates, Inc., Sebastopol, Calif., provide an excellent overview the creation of files using HTML and are incorporated by reference.

II. Build The Ancillary Files

Because (1) each file can contain a hypertext link to a target file that may not be in the same information product, and (2) the information products can be licensed and installed separately, the possibility exists that a file can be installed on an end-user's computer that contains a hypertext link to a target file that is not installed on the end-user's computer. The result is a hypertext link that, when executed, generates a run-time error because the target file is not installed on the computer.

To preclude run-time errors, the installer advantageously installs a "dummy" or "nominal" file into the end-user's computer in the same location and with the same name as each file that could be referenced but is not also installed. The nominal file advantageously does not contain the same information as the authentic file, but contains a notice that it is only a nominal file and that access to the authentic file requires the installation of another information product.

At step 102, ancillary files are built to enable the installer to know where to install the nominal files. In the illustrative embodiment, one ancillary file is built for each information product and the ancillary files indicates the name and location of each nominal file to be installed when that information product is installed.

There are two alternative techniques that can be used by the installer for installing the nominal files and the authentic files. According to the first technique, the installer installs all of the authentic files for all of the information products to be installed, and then installs all of the nominal files into those locations not containing an authentic file. According to the second technique, the installer installs all of the nominal files for all of the information products to be installed, and then installs all of the authentic files to be installed over the nominal files, perhaps overwriting over some or all of the nominal files. The choice of technique advantageously does not affect how the ancillary files are built. The installer associated with the illustrative embodiment uses the first technique, but it will be clear to those skilled in the art how to make and use embodiments of the present invention that use the second technique.

When the total number of files in all of the information products is small, each ancillary file associated with each information product can exhaustively list all of the files associated with every other information product. In contrast, when the total number of files in all of the information products is large, it is advantageous for each ancillary file to list only those files actually needed. To determine which files are needed, all of the files in all of the information products need to be examined to determine which files reference which other files.

FIG. 2 depicts an illustrative directed graph that represents all of the files in the three illustrative products and indicates which files contain hypertext links to other files. It will be clear to those skilled in the art how to determine the topology of the directed graph by examining all of the files in all of the products associated with an embodiment of the present invention.

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Each file in each product is represented by a polygon enclosing a number. Each of the five files associated with the Patent Law Library are depicted by a triangle; each of the three files associated with the Trademark Law Library are depicted by a square and each of the four files associated with the Copyright Law Library are depicted by a pentagon. The number inside the polygon indicates exactly which file it is associated with. For example, the file "file3.htm" is depicted by a triangle enclosing the number 3.

An arrow from one polygon to another indicates that the file associated with the first polygon contains at least one hypertext link to the file associated with the second polygon. A double-ended arrow indicates that both files contain hypertext links to each other.

Table 4 provides the same information as does FIG. 2, but in tabular format. Each row in Table 4 represents a file in one of the three products, and an "X" in a box means that the file associated with the row contains a hypertext link to the file associated with that column. Like the directed graph in FIG. 2, the entries in Table 4 are illustrative only. It will be clear to those skilled in the art how to make a similar table by examining all of the files in all of the information products associated with an embodiment of the present invention.

Although both the directed graph of FIG. 2 and Table 4 illustrate a tendency for files within an information product to reference other files within the same product, there are occurrence of files within one product containing references to files in other products.

TABLE 4

Which Files Externally Reference Which Files												
	1	2	3	4	5	6	7	8	9	10	11	12
1			X	X		X						X
2	X				X							
3			X		X			X				
4						X						
5				X		X						
6					X		X			X		
7			X			X		X	X			
8							X					
9							X	X				X
10											X	
11	X				X					X		X
12									X		X	

As both FIG. 2 and Table 4 indicate, there are three files (File 6, File 7 and File 11) not within the Patent Law Library that are referenced by files within Patent Law Library. Therefore, the Patent Law Library's ancillary file is built as shown in Table 5. Whenever the Patent Law Library is installed, the files listed in the ancillary file are advantageously also installed as nominal files.

TABLE 5

Ancillary File associated with the Patent Law Library	
Ancillary File	
\directory2\file6.htm	
\directory2\file7.htm	
\directory3\file11.htm	

As both FIG. 2 and Table 4 indicate, there are four files (File 3, File 5, File 9 and File 10) not within the Trademark Law Library that are referenced by files within Trademark Law Library. Therefore, the Trademark Law Library's ancillary file is built as shown in Table 6. Whenever the

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Trademark Law Library is installed, the files listed in the ancillary file are advantageously also installed as nominal files.

TABLE 6

<u>Ancillary File associated with the Trademark Law Library</u>	
Ancillary file	
	\\directory1\\file3.htm
	\\directory1\\file5.htm
	\\directory3\\file9.htm
	\\directory3\\file10.htm

As both FIG. 2 and Table 4 indicate, there are four files (File 1, File 5, File 7 and File 8) not within the Copyright Law Library that are referenced by files within Copyright Law Library. Therefore, the Copyright Law Library's ancillary file is built as shown in Table 7. Whenever the Copyright Law Library is installed, the files listed in the ancillary file are advantageously also installed as nominal files.

TABLE 7

<u>Ancillary File associated with the Copyright Law Library</u>	
Ancillary file	
	\\directory1\\file1.htm
	\\directory1\\file5.htm
	\\directory2\\file7.htm
	\\directory2\\file8.htm

III. Prepare For Distribution

Referring again to step 103 in FIG. 1, when each information product and its associated ancillary file are built, the files are advantageously prepared for distribution. Because all of the information products are advantageously distributed on the same medium (e.g., CD-ROM, DVD, diskette) or distributed electronically over a wide-area-network (e.g., the Internet), each information product is advantageously compressed with a lossless compression technique and encrypted, in well-known fashion, with the string, S, as the key.

The purpose of the compression is to reduce the amount of bandwidth each information product consumes during distribution and to reduce the entropy of the information products before encryption. The purpose of encryption is to enable the distribution of the information products without allowing unauthorized access to the information products after the information products have left the publisher's possession. In other words, the encryption allows the publisher to give a potential end-user a CD-ROM that contains all of information products but to retain control of the end-user's access to the information products. The installer advantageously knows the cryptosystem and key for decrypting each of the information products. How the publisher grants access to the information products after they have left his or her control will be described in detail below.

It will be clear to those skilled in the art how to prepare the information products and ancillary files for distribution.

IV. Distribute the Information Products

At step 104, the information products and ancillary files and the accompanying installer and its associated files are distributed on a single medium (e.g., a CD-ROM, DVD, etc.), on multiple media (e.g., diskettes, etc.) and/or electronically over a network (e.g., the Internet, etc.). It will be clear to those skilled in the art how to distribute the information products.

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V. Receive the Information Products

At step 105, the information products and ancillary files and the accompanying installer and its associated files are received by the end-user.

VI. Run the Installer

At step 106, the end-user initiates the installation process. When the information products are distributed on one or more media, the end-user inserts the media into his or her computer and runs the installer in well-known fashion. When the information products are distributed electronically over a network, the end-user collects the files on his or her computer and then runs the installer in well-known fashion.

VI. Locate and Cleanse the Token

At step 107, the installer advantageously checks to determine if the publisher has previously granted authorization to install one or more of the information products on the end-user's computer. The installer determines if the publisher has previously granted authorization by searching for a token on the end-user's computer, which token would have been placed there by an earlier edition of the installer from the publisher.

When an end-user obtains a subscription to one or more of the information products, the installer memorializes the authorization during the length of the subscription. This is advantageous because it relieves the publisher and the end-user from having to obtain explicit authorization for each issue during the length of the subscription.

The token can be conceptualized as a secret, authenticated message from one installer to a subsequent installer that indicates to the subsequent installer that the end-user's computer is granted access to certain of the information products for a given duration. How the token is created and placed on the end-user's computer will be described in detail below.

Advantageously, the token is a file with a name and location that are known to the installer. The token advantageously comprises a data structure comprising:

- (1) an authentication code;
- (2) an indicium of the name of the end-user;
- (3) a list of the information products to which the end-user has been granted access; and
- (4) an indicium of when the authorization for each information product expires.

Furthermore, the token file is encrypted so as to impede an end-user from illicitly obtaining access to an information product by doctoring the token. The encryption is performed, in well-known fashion, and the installer advantageously knows the both the cryptosystem and the key, T, for decrypting the token. Table 8 depicts the contents of the illustrative token.

TABLE 8

<u>Contents of the Illustrative token</u>	
	Authentication code
	Indicium of End-User's Identity
	Information Product No. 1; Expiration Date
	Information Product No. 2; Expiration Date

The authentication code is advantageously a 32-bit or longer string that is known to the installer and publisher and is not generally known to the public.

The indicium of the name of the user can either be the actual name of the end-user or a code that represents the name of the end-user. When a user illicitly attempts to share the token with others or to post it on a bulletin board or the Internet, it indelibly bears an indicium of the name of the

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person to whom it was originally given. If the publisher sees the token posted publicly, the publisher can decrypt the token, learn the identity of the user to whom the token was given and then investigate whether that user is inducing copyright infringement of the publisher's information products.

The list of information products to which the end-user has been authorized access can either list the products to which access has been authorized, or, alternatively, can list of all of the information products published and an indicium of whether access has been authorized or not for each product.

The indicium of when the access for each information product expires is advantageously based on the information products' version numbers rather than on calendar dates. Each edition of the installer is told what is the version number of the information products that accompany it.

FIG. 3 depicts a flowchart of the illustrative steps conducted by the installer in locating and cleansing the token, which is step 107 in FIG. 1. At step 301, the installer searches the end-user's computer for a file with the same name as the token and in the same location as expected. At step 303, if the installer locates a file with the same name as the token and in the same location as expected, then control passes to step 305, else the installer infers that authorization was not previously given. At step 305, the installer decrypts the found file, in well-known fashion, according to the cryptosystem and the key it knows. At step 307, the installer attempts to locate the candidate authentication code in the decrypted file and compares the candidate authentication code with the known authentication code, which the installer knows. If the installer determines that the candidate authentication code matches the known authentication code, the installer infers that the token is genuine and has not been doctored and control passes to step 309; else the installer infers that authorization was not previously given or the token was doctored and control passes to step 315. As a practical matter, a mismatched authentication code is likely to be the result of an end-user trying to gain unauthorized access to the information products by tinkering with the token.

At step 309, the installer determines if the any of the information products' authorizations have expired. If the any of the information products' authorizations have expired, then control passes to step 311. At step 311, the installer notifies the end-user which information products' authorizations have expired, and then control passes to step 313. At step 313, the installer determines if all of the information products' authorizations have expired, and if they have, control passes to step 315. At step 315, the installer deletes the token.

VII. Subscribe or Re-Subscribe?

Referring to step 108 in FIG. 1, the end-user is queried by the installer whether the end-user desires to subscribe to new information products or to re-subscribe to information products whose subscriptions have expired. If the end-user indicates "No," then the installer stops and the process ends. Otherwise, control passes to step 109.

VIII. Obtain Authorization

At step 109 the end-user seeks authorization to subscribe or re-subscribe to one or more information products. Because the various information products are encrypted, it is difficult for the end-user to access the information products unilaterally and without the installer's cooperation. The end-user acquires the installer's cooperation to decrypt and install the respective information products by entering into the installer a "password" or "launch code," which is chosen from a large number of possibilities so that probabilistically

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it is unlikely that the end-user can guess it. Advantageously, the publisher only provides the launch code to the end-user after the publisher is satisfied that the end-user has paid for access to the desired information products.

FIG. 4 depicts a flowchart of the steps involved in the illustrative embodiment for obtaining and providing authorization to begin a subscription. First, at step 400 the installer advantageously requires that the end-user enter all or a portion of his or her name. At step 401, the installer then generates and notifies the end-user of a 32-bit or longer "serial number," R, that is advantageously based on a random number generated by the installer. The serial number can also be based, in part, on the end-user's name, as input at step 400. It is advantageous that the end-user not be able to control what serial number is generated, nor that the same serial number be generated each time step 401 is encountered.

At step 403, the end-user then advantageously contacts the publisher via the telephone or the Internet and provides to the publisher:

- (1) the end-user's name and address;
- (2) the end-user's credit card information or other method of payment;
- (3) the name of the information products that the end-user desires to subscribe to and for what duration; and
- (4) the serial number, R, generated by the installer at step 401.

When the publisher is satisfied that he or she will be paid for the subscription, the publisher creates the launch code by encrypting a data structure comprising:

- (1) an authentication code;
- (2) an indicium of the name of the end-user;
- (3) a list of the information products to which the end-user has been granted access; and
- (4) an indicium of when the authorization for each information product expires in a cryptosystem known to the installer using R as the key. Advantageously, only the publisher and the installer know the cryptosystem used for encrypting and decrypting the launch code. It will be clear to those skilled in the art how to create the launch code. At steps 409 and 411, the publisher transmits the launch code to the end-user, who enters the launch code into the installer.

At step 413, the installer decrypts the launch code with R as the key. At step 415, the installer recovers the candidate authentication code from the decrypted launch code and determines if the candidate authentication code matches the authentication code known to the installer. When the authentication code matches, the installer infers that the launch code is authentic and control passes to step 419. When the authentication code does not match, the installer infers that the launch code has been corrupted or doctored, and control passes to step 417. At step 417 the end-user is notified by the installer that the launch code is not accepted and control passes to step 401.

At step 419, the installer notifies the end-user that the launch code is accepted and also advantageously notifies the end-user that subscriptions for what product have been authorized and for what duration.

The purpose of generating a new serial number, R, each time the installer requires a launch code is to prevent the end-user from using a single launch code to install the information products on multiple computers. The purpose of encrypting the data structure at step 407 is to impede an end-user from manipulating the parameters in the data structure to get more than was paid for.

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The purpose of putting an indicium of the end-user's identity into the launch code is identical to the reason the indicium of the end-user's identity was put into the token. That is, if an end-user shares the launch code with others or to post it on a bulletin board or the Internet, it indelibly bears the name of the person to whom it was originally given. If the publisher sees the launch code posted publicly, the publisher can decrypt the launch code, learn the identity of the user to whom the launch code was given and then investigate whether that end-user is inducing copyright infringement of the publisher's information products. Because the publisher may not know what value of R was used to encrypt that particular launch code, the existence of the known authentication code in the plaintext provides the publisher with information to make a known-plaintext cryptanalytic attack on the launch code.

IX. Install the Products

At step 111 in FIG. 1, the installer installs all of the information products that have been authorized by the publisher to be installed. This includes both the information products whose authorization was given previously in the token, and the information products whose authorization was obtained in step 109.

Advantageously, the installer decrypts the authorized information products and installs them on the end-user's computer in well-known fashion. Then the installer uses the ancillary file associated with each installed information product to install the nominal files, if any, on the end-user's computer, as described above.

X. Memorialize the Authentication

At step 112 in FIG. 1, the installer memorializes the authorization of the various information products by updating the token located in step 107, if necessary, with the new authorizations, if any, obtained in step 109. The revised token is then advantageously encrypted with a cryptosystem and a key, T, that will be known to later editions of the installer. The encrypted token is then stored on the end-user's computer with a name and in location to be known by later editions of the installer.

What is claimed is:

1. A method comprising:

receiving an encrypted launch code;
decrypting said encrypted launch code with a string, R, as the key to recover a first candidate authentication code and an indicium of a first information product; and
installing said first information product onto said computer when said candidate authorization code matches a first known authorization code.

2. The method of claim 1 further comprising:

decrypting said encrypted launch code with said string, R, as the key to recover an indicium of a second information product; and
installing said second information product onto said computer when said first candidate authorization code matches said first known authorization code.

3. The method of claim 1 further comprising:

decrypting said encrypted launch code with said string, R, as the key to recover an indicium of when the authorization for said first information product expires; and
installing said first information product onto said computer when said first candidate authorization code matches said first known authorization code and said indicium of when the authorization for said first information product expires has not expired.

4. The method of claim 1 further comprising:

creating a token comprising a second known authentication code and said indicium of said first information product;

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encrypting said token with a string, T, to create an encrypted token; and

storing said encrypted token on said computer.

5. The method of claim 4 wherein said token further comprises an indicium of a second information product.

6. The method of claim 4 wherein said token further comprises an indicium of when the authorization for said first information product expires.

7. The method of claim 4 wherein said token further comprises an indicium of the end-user to whom said encrypted launch code is provided.

8. The method of claim 4 wherein said first known authentication code and said second known authentication code are the same and said string R and said string T are the same.

9. The method of claim 4 further comprising:

reading said encrypted token from said computer;

recovering from said encrypted token with said string, T, to recover a second candidate authentication code and said indicium of a first information product; and

installing said first information product onto said computer when said second candidate authorization code matches said second known authorization code.

10. The method of claim 9 further comprising:

recovering from said encrypted token an indicium of when the authorization for said first information product expires; and

installing said first information product onto said computer when said second candidate authorization code matches said second known authorization code and said indicium of when the authorization for said first information product expires has not expired.

11. The method of claim 5 further comprising:

recovering from said token an indicium of a second information product and an indicium of when the authorization for said second information product expires; and

installing said second information product onto said computer when said second candidate authorization code matches said second known authorization code and said indicium of when the authorization for said second information product expires has not expired.

12. The method of claim 11 wherein said indicium of when the authorization for said first information product expires and said indicium of when the authorization for said second information product expires are the same.

13. The method of claim 1 further comprising installing at least one nominal file for a second information product onto said computer.

14. A method comprising:

reading an encrypted token from a computer;

decrypting said encrypted token with a string, T, as the key to recover an indicium of a first information product;

installing said first information product onto said computer; and

installing at least one nominal file for a second information product onto said computer.

15. The method of claim 14 further comprising:

recovering from said encrypted token with said string, T, as the key to recover an indicium of a second information product; and

installing said second information product onto said computer.

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16. The method of claim 14 further comprising:
recovering from said encrypted token with said string, T,
as the key to recover an indicium of when the autho-
rization for said first information product expires; and
installing said first information product onto said com- 5
puter when said indicium of when the authorization for
said first information product expires has not expired.
17. A method comprising:
reading an encrypted token from a computer;
decrypting said encrypted token with a string, T, as the 10
key to recover a token that comprises an indicium of a
first information product;

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modifying said token to comprise an indicium of a second
information product;
encrypting said token with said string, T, as the key to
create a newly encrypted token; and
storing said newly encrypted token on said computer.
18. The method of claim 17 further comprising modifying
said token to comprise an indicium of when the authoriza-
tion for said second information product expires.
19. The method of claim 17 wherein said token comprises
an indicium of an end-user.

* * * * *

Case Number	Filing Date	Institution Decision Date	Patent Number	Application Number	Petitioner	Patent Owner	Status	Tech Center
IPR2013-00080	12/14/2012	6/3/2013	6173403	09288012	Apple Inc.	Achates Reference Publishing, Inc.	Final Decision	2700

Documents

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	Name	Type	Exhibit/Paper Number	Filing Date	Filing Party	Availability
1	Petition for Inter Partes Review	Petition	2	12/14/2012	Petitioner	Public
2	Power of Attorney	Power of Attorney	3	12/14/2012	Petitioner	Public
3	Updated Exhibits and Exhibit List	Notice	4	12/17/2012	Petitioner	Public
4	Notice of Filing Date Accorded	Notice of Filing Date Accorded to Petition	5	12/20/2012	Board	Public
5	Power of Attorney	Power of Attorney	6	3/5/2013	Patent Owner	Public
6	Related Matters	Notice	7	3/7/2013	Potential Patent Owner	Public
7	Power of Attorney	Power of Attorney	8	3/7/2013	Potential Patent Owner	Public
8	Order- Authorizing Motion for Additional Discovery	Notice	9	3/14/2013	Board	Public
9	for Additional Discovery	Motion	10	3/15/2013	Patent Owner	Public
10	Cited Authority in Motion	Notice	12	3/15/2013	Patent Owner	Public
11	Petr's Opposition to PO's Motion Discovery	Opposition	13	3/19/2013	Petitioner	Public
12	Preliminary Response	Preliminary Response	14	3/20/2013	Patent Owner	Public
13	Authority Cited	Notice	15	3/20/2013	Patent Owner	Public
14	Order- Conduct of the Proceedings	Notice	16	3/27/2013	Board	Public
15	Corrected Response Statement of Facts	Preliminary Response	17	3/29/2013	Patent Owner	Public
16	Decision - Achates Motion for Additional Discovery	Notice	18	4/3/2013	Board	Public
17	Petitioner's Transmittal Letter and Exhibit List	Notice	19	4/8/2013	Petitioner	Public
18	Updated Exhibit List	Notice	20	4/8/2013	Patent Owner	Public
19	Order - Conduct of the Proceedings - 37 CFR 42.5	Notice	21	5/17/2013	Board	Public
20	Decision - Institution of Inter Partes Review - 37 CFR 42.108	Institution Decision	22	6/3/2013	Board	Public

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	Name	Type	Exhibit/Paper Number	Filing Date	Filing Party	Availability
21	Scheduling Order	Notice	23	6/3/2013	Board	Public
22	Objection to Exhibit	Notice	24	6/17/2013	Patent Owner	Public
23	Updated Exhibit List	Notice	25	6/17/2013	Patent Owner	Public
24	List of Proposed Motions	Notice	26	6/26/2013	Patent Owner	Public
25	Proposed Motions List	Notice	27	6/26/2013	Petitioner	Public
26	Order - Conduct of the Proceedings	Notice	28	7/3/2013	Board	Public
27	Substitute Back-up Counsel	Notice	29	7/25/2013	Patent Owner	Public
28	NOTD SCHNEIER	Notice	31	7/25/2013	Patent Owner	Public
29	Stipulation to Extend Due Dates	Notice	33	8/15/2013	Patent Owner	Public
30	Updated Exhibit List	Notice	34	8/29/2013	Petitioner	Public
31	Petr Updated Exhibit List	Notice	35	9/13/2013	Petitioner	Public
32	Updated Exhibit List	Notice	37	9/17/2013	Patent Owner	Public
33	PATENT OWNER'S RESPONSE	Opposition	39	9/17/2013	Patent Owner	Public
34	Cited Authority	Notice	40	9/17/2013	Patent Owner	Public
35	Updated Mandatory Notice	Notice	41	9/23/2013	Patent Owner	Public
36	Notice of Taking Deposition of Xin Wang	Notice	42	11/7/2013	Petitioner	Public
37	Notice of Taking Deposition of Dmitry Radel	Notice	43	11/7/2013	Petitioner	Public
38	Order - Conduct of the Proceedings	Notice	44	12/16/2013	Board	Public
39	Revised Scheduling Order	Notice	47	12/17/2013	Board	Public
40	Notice re Email Communications btw PO Experts and Updated Exhibit List	Notice	48	12/17/2013	Petitioner	Public



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41	ORDER Conduct of the Proceeding § 42.5	Notice	49	12/23/2013	Board	Public
42	Updated Exhibit List	Notice	50	1/2/2014	Patent Owner	Public
43	Petitioner's Motion for Additional Discovery of Certain Expert Communications	Motion	51	1/3/2014	Petitioner	Public
44	Updated Exhibit List	Notice	55	1/10/2014	Patent Owner	Public
45	Updated Exhibit List	Notice	56	1/11/2014	Patent Owner	Public
46	Patent Owner Response to MTN for Add'l Discovery re expert communications	Opposition	57	1/13/2014	Patent Owner	Public
47	Petitioner's Reply to Patent Owner's Opposition	Reply	58	1/13/2014	Petitioner	Public
48	Petitioner's Response to Patent Owner Statement of Facts	Reply	59	1/13/2014	Petitioner	Public
49	Updated Exhibit List	Notice	60	1/13/2014	Petitioner	Public
50	Order - Conduct of the Proceedings	Notice	61	1/21/2014	Board	Public
51	Updated Exhibit List	Notice	62	1/27/2014	Patent Owner	Public
52	Petitioner's Request for Oral Argument	Notice	63	1/29/2014	Petitioner	Public
53	Patent Owner's Request for Oral Hearing	Notice	64	1/29/2014	Patent Owner	Public
54	Motion to Exclude Evidence	Motion	65	1/29/2014	Patent Owner	Public
55	Decision - Petitioner's Motion for Additional Discovery - 37 CFR 42.51(b)(2)	Notice	66	1/31/2014	Board	Public
56	ORDER Trial Hearing	Notice	67	2/3/2014	Board	Public
57	Order - Conduct of the Proceedings	Notice	68	2/4/2014	Board	Public
58	Amended Motion to Exclude	Motion	69	2/4/2014	Patent Owner	Public
59	Petitioner's Opposition to Patent Owner's Motion to Exclude	Opposition	70	2/6/2014	Petitioner	Public
60	Petitioner's Response to Patent Owner Proposed Material Statement of Facts	Notice	71	2/6/2014	Petitioner	Public



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61	Reply to Opposition to Motion to Exclude	Reply	72	2/12/2014	Patent Owner	Public
62	Order - Conduct of the Proceedings	Notice	73	2/12/2014	Board	Public
63	Petitioner's Motion for Observation on Expert Communications	Motion	74	2/17/2014	Petitioner	Public
64	Updated Exhibit List	Motion	75	2/17/2014	Petitioner	Public
65	Update Exhibit List	Notice	76	2/18/2014	Patent Owner	Public
66	Updated Exhibit List	Notice	77	2/21/2014	Patent Owner	Public
67	Patent Owner's Motion to Seal	Motion	78	2/21/2014	Patent Owner	Public
68	Response to Petitioner's Motion for Observation	Opposition	79	2/21/2014	Patent Owner	Public
69	Updated Exhibit List	Notice	80	2/24/2014	Patent Owner	Public
70	Petitioner's Updated Exhibit List	Notice	81	2/24/2014	Petitioner	Public
71	Petitioner's Updated Exhibit List	Notice	82	2/25/2014	Petitioner	Public
72	Updated Exhibit List	Notice	83	2/25/2014	Patent Owner	Public
73	Petitioner's Opposition to Patent Owner's Motion to Seal	Opposition	84	2/28/2014	Petitioner	Public
74	Petitioner's Updated Exhibit List	Notice	85	2/28/2014	Petitioner	Public
75	Power of Attorney	Power of Attorney	86	3/3/2014	Patent Owner	Public
76	Updated Mandatory Notice	Notice	87	3/3/2014	Patent Owner	Public
77	Order - Conduct of the Proceedings 37 C.F.R. 42.5	Notice	88	3/6/2014	Board	Public
78	Oral Hearing Transcript	Notice	89	4/2/2014	Board	Public
79	Final Written Decision - 35 USC 318(a) and 37 CFR 42.73	Final Decision	90	6/2/2014	Board	Public
80	Patent Owner Notice of Appeal	Notice of Appeal	91	7/30/2014	Patent Owner	Public

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	Name	Type	Exhibit/Paper Number	Filing Date	Filing Party	Availability
81	US Patent 5,982,889	Exhibit	1001	12/14/2012	Petitioner	Public
82	File History of US Patent 5,982,889	Exhibit	1002	12/14/2012	Petitioner	Public
83	Declaration of Bruce Schneier re 889 w appendices - Updated	Exhibit	1003	12/17/2012	Petitioner	Public
84	Curriculum Vitae of Bruce Schneier	Exhibit	1004	12/14/2012	Petitioner	Public
85	US Patent 5,949,876	Exhibit	1005	12/14/2012	Petitioner	Public
86	US Patent 5,864,620	Exhibit	1006	12/14/2012	Petitioner	Public
87	US Patent 5,933,497	Exhibit	1007	12/14/2012	Petitioner	Public
88	US Patent 6,134,324	Exhibit	1008	12/14/2012	Petitioner	Public
89	US Patent 4658093	Exhibit	1009	12/14/2012	Petitioner	Public
90	US Patent 4433207	Exhibit	1010	12/14/2012	Petitioner	Public
91	US Patent 4458315	Exhibit	1011	12/14/2012	Petitioner	Public
92	US Patent 5673316	Exhibit	1012	12/14/2012	Petitioner	Public
93	US Patent 5553143	Exhibit	1013	12/14/2012	Petitioner	Public
94	US Patent 5563946	Exhibit	1014	12/14/2012	Petitioner	Public
95	US Patent 6075862	Exhibit	1015	12/14/2012	Petitioner	Public
96	US Patent 5103476	Exhibit	1016	12/14/2012	Petitioner	Public
97	US Patent 5621797	Exhibit	1017	12/14/2012	Petitioner	Public
98	US Patent 5935246	Exhibit	1018	12/14/2012	Petitioner	Public
99	US Patent 5319705	Exhibit	1019	12/14/2012	Petitioner	Public
100	US Patent 4405829	Exhibit	1020	12/14/2012	Petitioner	Public



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101	NetBill Security and Transaction Protocol	Exhibit	1021	12/14/2012	Petitioner	Public
102	ABYSS: A Trusted Architecture for Software Protection	Exhibit	1022	12/14/2012	Petitioner	Public
103	Cryptographic Containers and the Digital Library	Exhibit	1023	12/14/2012	Petitioner	Public
104	Applied Cryptography	Exhibit	1024	12/14/2012	Petitioner	Public
105	The Codebreakers	Exhibit	1025	12/14/2012	Petitioner	Public
106	Microsoft Press Computer Dictionary	Exhibit	1026	12/14/2012	Petitioner	Public
107	Security for Computer Networks	Exhibit	1027	12/14/2012	Petitioner	Public
108	Mathematical Cryptology	Exhibit	1028	12/14/2012	Petitioner	Public
109	Cryptography: A New Dimension in Computer Data Security	Exhibit	1029	12/14/2012	Petitioner	Public
109	Security in Computing	Exhibit	1030	12/14/2012	Petitioner	Public
111	Cryptography and Data Security	Exhibit	1031	12/14/2012	Petitioner	Public
112	File History of US Patent Application 09/758,111	Exhibit	1032	12/14/2012	Petitioner	Public
113	Joint Claim Construction and Prehearing Statement from 11-294	Exhibit	1033	12/14/2012	Petitioner	Public
114	Achates Opening Claim Construction Brief from 11-294	Exhibit	1034	12/14/2012	Petitioner	Public
115	Defendants' Responsive Claim Construction Brief from 11-294	Exhibit	1035	12/14/2012	Petitioner	Public
116	Achates' Reply Claim Construction Brief from 11-294	Exhibit	1036	12/14/2012	Petitioner	Public
117	Achates' Amended Complaint from 11-294	Exhibit	1037	12/14/2012	Petitioner	Public
118	Achates' LR3-3 Infringement Contentions from 11-294	Exhibit	1038	12/14/2012	Petitioner	Public
119	US Patent 6173403	Exhibit	1039	12/14/2012	Petitioner	Public
120	File History of US Patent 6173403	Exhibit	1040	12/14/2012	Petitioner	Public



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121	Declaration of Bruce Schneier re 403 w appendices - Updated	Exhibit	1041	12/17/2012	Petitioner	Public
122	District Court's Proposed Constructions	Exhibit	1042	12/14/2012	Petitioner	Public
123	Petitioner Initial Disclosures	Exhibit	1043	4/8/2013	Petitioner	Public
124	Transcript of the Conference Call with the Administrative Patent Law Judges During the Deposition of Bruce Schneier, Vol. 1 (Aug. 20, 2013)	Exhibit	1044	8/29/2013	Petitioner	Public
125	Deposition Transcript of Bruce Schneier Vol 1	Exhibit	1045	9/13/2013	Petitioner	Public
126	Deposition Transcript of Bruce Schneier Vol 2	Exhibit	1046	9/13/2013	Petitioner	Public
127	US Patent 6859533	Exhibit	1047	1/13/2014	Petitioner	Public
128	US Patent 7139736	Exhibit	1048	1/13/2014	Petitioner	Public
129	Wang On DRM Interoperability and Compatibility	Exhibit	1049	1/13/2014	Petitioner	Public
130	Wang Rights Expression Languages in Digital Rights Management	Exhibit	1050	1/13/2014	Petitioner	Public
131	US Patent 6519700	Exhibit	1051	1/13/2014	Petitioner	Public
132	NIST Fact Sheet on Digital Signature Standard	Exhibit	1052	1/13/2014	Petitioner	Public
133	Freier The SSL Protocol Version 3.0	Exhibit	1053	1/13/2014	Petitioner	Public
134	Expert Report of John P. Pettitt	Exhibit	1054	1/13/2014	Petitioner	Public
135	Microsoft Technical Details on Microsoft Product Activation for Windows XP	Exhibit	1055	1/13/2014	Petitioner	Public
136	Wells The Windows XP Product Activation Guide	Exhibit	1056	1/13/2014	Petitioner	Public
137	Wang Depo Transcript Vol. 1	Exhibit	1057	12/17/2013	Petitioner	Public
138	Wang Depo Transcript Vol. 2	Exhibit	1058	12/17/2013	Petitioner	Public
139	Radbel Depo Transcript Vol.1	Exhibit	1059	12/17/2013	Petitioner	Public
140	Excerpt of Radbel Transcript Vol. 2	Exhibit	1060	12/17/2013	Petitioner	Public

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141	Rough Radbel Depo Transcript Vol. 2 AM	Exhibit	1061	12/17/2013	Petitioner	Public
142	Rough Radbel Depo Transcript Vol. 2 PM	Exhibit	1062	12/17/2013	Petitioner	Public
143	Webster's Dictionary Excerpt 1993	Exhibit	1066	1/13/2014	Petitioner	Public
144	POM Achates email page 516	Exhibit	1067	2/17/2014	Petitioner	Public
145	POM Achates Email Pages 123-124	Exhibit	1068	2/17/2014	Petitioner	Public
146	Petitioner's Undisputed Demonstratives	Exhibit	1069	2/24/2014	Petitioner	Public
147	Petitioner's Disputed Slide 7	Exhibit	1070	2/24/2014	Petitioner	Public
148	Petitioner's Disputed Slide 35	Exhibit	1071	2/24/2014	Petitioner	Public
149	Petitioner's Disputed Slide 41	Exhibit	1072	2/24/2014	Petitioner	Public
150	Petitioner's Disputed Slide 56	Exhibit	1073	2/24/2014	Petitioner	Public
151	Petitioner's Disputed Slides 62-64	Exhibit	1074	2/24/2014	Petitioner	Public
152	Revised Petitioner Demonstratives	Exhibit	1075	2/25/2014	Petitioner	Public
153	Email between Counsel re Production	Exhibit	1076	2/28/2014	Petitioner	Public
154	Complaint	Exhibit	2001	3/15/2013	Patent Owner	Public
155	Centanni Dec	Exhibit	2002	3/15/2013	Patent Owner	Public
156	Subpoena	Exhibit	2003	3/15/2013	Patent Owner	Public
157	Objections	Exhibit	2004	3/15/2013	Patent Owner	Public
158	2nd Docket Control Ord	Exhibit	2005	3/15/2013	Patent Owner	Public
159	Agreement	Exhibit	2006	3/15/2013	Patent Owner	Public
160	Markman Order	Exhibit	2007	3/20/2013	Patent Owner	Public

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161	EA Scrabble webpages	Exhibit	2008	3/20/2013	Patent Owner	Public
162	QuickOffice webpages	Exhibit	2009	3/20/2013	Patent Owner	Public
163	Symantec-Norton webpages	Exhibit	2010	3/20/2013	Patent Owner	Public
164	Initial Disclosures	Exhibit	2011	4/8/2013	Patent Owner	Public
165	Document comparison	Exhibit	2012	6/17/2013	Patent Owner	Public
166	Radbel Dec	Exhibit	2013	9/17/2013	Patent Owner	Public
167	Wang Dec	Exhibit	2014	9/17/2013	Patent Owner	Public
168	RSA & Patents Article	Exhibit	2015	9/17/2013	Patent Owner	Public
169	Practical Cryptography	Exhibit	2016	9/17/2013	Patent Owner	Public
170	EFF Board Directors	Exhibit	2017	9/17/2013	Patent Owner	Public
171	EFF Patent Busting	Exhibit	2018	9/17/2013	Patent Owner	Public
172	Eff Trolls	Exhibit	2019	9/17/2013	Patent Owner	Public
173	Bruce Schneier, Applied Cryptography (1996)	Exhibit	2020	2/21/2014	Patent Owner	Public
174	2010 Agreement	Exhibit	2021	9/17/2013	Patent Owner	Public
175	20019 Agreement	Exhibit	2022	9/17/2013	Patent Owner	Public
176	Eff All Your Apps	Exhibit	2023	9/17/2013	Patent Owner	Public
177	Wang Resume	Exhibit	2024	9/17/2013	Patent Owner	Public
178	Radbel Resume	Exhibit	2025	9/17/2013	Patent Owner	Public
179	IPO Overview	Exhibit	2026	9/17/2013	Patent Owner	Public
180	UMG employ technology	Exhibit	2027	9/17/2013	Patent Owner	Public



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181	Cirrus Logic	Exhibit	2028	9/17/2013	Patent Owner	Public
182	Article	Exhibit	2029	9/17/2013	Patent Owner	Public
183	Transcript of Proceedings	Exhibit	2030	1/2/2014	Patent Owner	Public
184	Radbel deposition Vol 1	Exhibit	2031	1/10/2014	Patent Owner	Public
185	Radbel Deposition Vol 2	Exhibit	2032	1/10/2014	Patent Owner	Public
186	Expunged	Exhibit	2033	1/10/2014	Patent Owner	Public
187	Wang deposition Vol 1	Exhibit	2034	1/11/2014	Patent Owner	Public
188	Wang deposition vol 2	Exhibit	2035	1/11/2014	Patent Owner	Public
189	Expunged	Exhibit	2036	1/11/2014	Patent Owner	Public
190	Radbel Revised Errata	Exhibit	2037	1/27/2014	Patent Owner	Public
191	Wang Revised Errata	Exhibit	2038	1/27/2014	Patent Owner	Public
192	wikipedia hexadecimal	Exhibit	2039	1/29/2014	Patent Owner	Public
193	ascii character set	Exhibit	2040	1/29/2014	Patent Owner	Public
194	microsoft windows xp	Exhibit	2041	1/29/2014	Patent Owner	Public
195	wikipedia windows xp	Exhibit	2042	1/29/2014	Patent Owner	Public
196	wikipedia qwerty	Exhibit	2043	1/29/2014	Patent Owner	Public
197	handbook applied cryptography	Exhibit	2044	1/29/2014	Patent Owner	Public
198	EXPUNGED	Exhibit	2045	1/29/2014	Patent Owner	Public
199	email objections	Exhibit	2046	1/29/2014	Patent Owner	Public
200	objections	Exhibit	2047	1/29/2014	Patent Owner	Public

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201	Email exchange	Exhibit	2048	2/4/2014	Patent Owner	Public
202	Transcript of 2/3/14 Conf Call w/Board	Exhibit	2049	2/18/2014	Patent Owner	Public
203	Patent Owner's Demonstratives	Exhibit	2050	2/24/2014	Patent Owner	Public
204	Revised Patent Owner Demonstratives	Exhibit	2051	2/25/2014	Patent Owner	Public
205	Expunged	Exhibit	4001	12/14/2012	Petitioner	Public
206	Expunged	Exhibit	4002	12/14/2012	Petitioner	Public

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